

For
Dublin **REPORT** *Taylor & Co*
Bl **OF THE**
MANAGING COMMITTEE
OF THE *London*
HOUSE OF RECOVERY
AND
FEVER HOSPITAL
IN
CORK-STREET, DUBLIN,
FOR ONE YEAR ENDING THE 4TH JANUARY 1829;
WITH THE
Medical Report annexed.

DUBLIN:
PRINTED FOR THE COMMITTEE,
BY BENTHAM AND HARDY, CECILIA-STREET
1829.

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1829.

304570

LEGACIES

MAY BE BEQUEATHED IN THE FOLLOWING MANNER:

“ I give and bequeath to the Treasurers of the House of Recovery in Cork-street, Dublin, the Sum of (in trust) to be applied towards the benevolent purposes of the Institution.”



Managing Committee,

EDWARD ALLEN,	JOHN HONE,
EDWARD BARRINGTON,	JOHN DAVID LATOUCHE,
SAMUEL BEWLEY,	PETER LATOUCHE,
THOMAS CROSTHWAIT,	JOHN LELAND MAQUAY,
WILLIAM DISNEY,	MYLES M'DONNELL,
THOMAS DISNEY,	GEORGE MILLNER,
ARTHUR GUINNESS,	ROBERT ORR,
BENJAMIN LEE GUINNESS,	JAMES M. PIKE,
WILLIAM ENGLISH,	GEORGE RENNY,
WILLIAM HARDING.	FRANCIS TARDY, ESQRS.
JOSEPH HONE,	

Physicians,

WILLIAM STOKER, M. D.	RICHARD GRATTAN, M. D.
SAMUEL ROBINSON, M. D.	PATRICK HARKAN, M. D.
JOHN O'BRIEN, M. D.	JOHN O'REARDON M. D.

Temporary Physicians,

JOHN EUSTACE, M. D.	SAMUEL STRATTEN, M. D.
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Surgeon,

LEONARD TRANT.

Resident Officers,

<i>Register,</i>			JAMES MONTGOMERY,
<i>Apothecary,</i>			JOHN HALE,
<i>Assistant do.</i>	.....	.....	PATRICK LAWLESS,
<i>Collector,</i>	.....	.....	HENRY HARRIS,
<i>Housekeeper,</i>	.....	.....	MARGARET TOPHAM,
<i>Assistant do.</i>	.....	.....	HARRIET TOPHAM,
<i>Head Nurse,</i>	.....	.....	ANNE BRIDGES.

SERVANTS USUALLY EMPLOYED AT THE HOSPITAL,
WHO ARE INCREASED OR DECREASED ACCORDING TO CIRCUMSTANCES:

Three Porters, two Whitewashers, twenty Nurses, and ten Female Servants; besides one Engineer, attendant on washing apparatus, and an Assistant, who acts as Messenger, and inspects the whitewashing of the apartments from whence Patients are removed to the Hospital.

A

STATEMENT

OF THE

NUMBER OF PATIENTS ADMITTED INTO THE HOSPITAL

IN THE YEAR 1828.

Together with the aggregate number of Days spent by the said Patients in the Hospital; also, the total Expense of Provisions, by which is shown the average number of Days each Patient remained in the Hospital, and the average Expense of each Patient.

1828.

Patients admitted.....	.....	.....	.....	2,932
Aggregate number of days in Hospital, .....	.....	.....	.....	48,944
Average number of days of each Patient, nearly .....	.....	.....	.....	16 $\frac{3}{4}$
Total Expense of Hospital this year, .....	.....	.....	£4,465	5 1
Total expense of Provisions for Patients and Servants,...	1,299	5	3	
Average expense of each Patient, .....	.....	.....	1 10	5 $\frac{1}{2}$
Average expense of Provisions daily of Patients and Servants, 0	0	5		

PATIENTS.

Admitted from 14th May, 1804, to 4th January, 1829,

inclusive,	.....	.....	.....	.....	78,248
Discharged cured...	.....	.....	.....	.....	73,287
Died ...	.....	.....	.....	.....	4,851
Remaining in Hospital, 5th January, 1829,	.....				110
					78,248

In Hospital 5th January, 1828, ... 207

Admitted from 5th Jan. 1828, to 4th Jan. 1829, ... 2,932

					3,139
Discharged cured...	.....	.....	.....	.....	2,836
Died ...	.....	.....	.....	.....	193
Remaining 5th January, 1829,	.....				110
					3,139

Account of Income and Expenditure of the FEVER HOSPITAL and HOUSE OF RECOVERY, Cork-street, Dublin,

FOR ONE YEAR, ENDING 5TH JANUARY, 1829.

EXPENDITURE.			INCOME.		
To Rent and Insurance of Premises	....	£86 3 0	By Parliamentary Grant,	....	£3,859 7 8
— Maintenance of Patients and Servants,	....	1,299 5 3	— Received for a cast Horse, sold,	....	8 3 6
— House-Bedding, Furniture, and Clothing,	....	199 18 4	— Overpaid Zach. Shaw, last year,	....	0 2 0
— Salaries of Officers, Nurses, and Servants,	....	1,486 2 9	— Interest on Government Stock,	....	222 5 2
— Fuel, Soap, and Candles, ..	....	543 5 7	— Ditto on Grand Canal Debentures,....	....	184 12 4
— Printing and Stationary,....	....	55 14 6	— Ditto on George Burroughs' Legacy, ..	....	46 3 0
— Medicine, Wine, and Spirits,	....	253 16 1	— Ditto on Lady Hutchinson's ditto, ....	....	16 5 4
— Horses, ..	....	21 18 3	— Subscriptions, ..	....	370 8 9
— Repairs, ..	....	330 6 3	— Donations, ....	....	32 9 3
— Incidents, ....	....	14 5 8			
— Whitewashing, ....	....	117 12 7			
— Funeral Expenses, ....	....	56 16 4			
		£4,465 5 1			
Excess of Income over Expenditure,....	..	274 11 11			
		£4,739 17 0			£4,739 17 0

Account of the Property of the Institution, exclusive of Buildings and Premises, Furniture and Clothing.

Government Stock $3\frac{1}{2}$ per cent. including value of £2,000 allocated by the Lord Chancellor, out of the late	£5,503 12 5
Dr. Barrett's Property, ....	....
Fifty Grand Canal Debentures* of £96 2s. 6d. each, valued at £12, ...	3,600 0 0

* Bequest of the late Thomas Pleasants, Esq.

LIST OF SUBSCRIBERS FOR 1828.

	£.	s.	d.		£	s.	d.
William Alexander ..	3	3	0	Thomas Ellis ..	10	10	0
Edward Allen ..	2	2	0	William English ..	2	0	0
William Andrews ..	1	1	0	Andrew Ennis ..	1	1	0
Thomas Baker ..	1	1	0	Ferrier and Co. ..	4	4	0
Mrs. Balfour ..	2	2	0	John Fitzpatrick ..	1	1	0
Ballast Office ..	6	6	0	Corry Fowler ..	1	1	0
Edward Barrington ..	1	1	0	Jeoffry Foot ..	1	1	0
Thomas Beasley, jun. ..	1	1	0	Thomas Fuller ..	1	1	0
George Beaumont ..	2	2	0	William Furlong ..	1	1	0
The Misses Betagh ..	1	1	0	Matthew Franks ..	1	1	0
Samuel Bewley ..	5	5	0	Thomas Fannan ..	1	1	0
William Bigger ..	1	1	0	Samuel Gamble ..	2	2	0
Frederick Bourne ..	2	0	0	Samuel Gatchell ..	2	2	0
Samuel Bruce ..	2	2	0	D. F. Gardiner ..	1	1	0
Henry Bruce ...	1	1	0	J. R. Garrett ..	1	1	0
Boileau, Sons, and George ..	2	2	0	Jacob Geoghegan ..	5	5	0
John Bushy, sen. ..	2	2	0	Joseph Goff, sen. ..	2	2	0
Walter Burke ..	1	1	0	Joseph Goff, jun. ..	5	0	0
Joseph Byrne ..	1	0	0	Grenville and Co. ..	1	1	0
Miss Ball ..	1	0	0	Timothy Greene ..	1	1	0
Miss S. D. Ball ..	1	0	0	John Grierson ..	1	1	0
J. and H. Boswell ..	1	1	0	Arthur Guinness ..	5	0	0
William Carroll ..	1	1	0	Doctor Guinness ..	2	2	0
Anne Carrothers ..	1	1	0	Benjamin Lee Guinness ..	2	2	0
William Carlton ..	1	1	0	Mr. Gresham ..	1	1	0
Adam Calvert ..	1	1	0	G. Gillington ..	1	1	0
Francis Codd ..	1	1	0	James Hamilton ..	2	2	0
William C. Colville ..	2	2	0	Robert Hamilton ..	1	1	0
Edward Croker ..	1	1	0	Henry Hamilton ..	4	0	0
Morgan Crofton ..	2	2	0	Michael Harris ..	1	1	0
Thomas Crosthwait ..	2	2	0	Joseph Hone ..	2	2	0
Leland Crosthwait, jun. ..	2	2	0	John Hone ..	2	2	0
Rev. E. H. Crofton ..	1	1	0	Nathaniel Hone ..	5	0	0
Richard Cooke ..	1	1	0	Mrs. E. Hone ..	2	2	0
John Cossart ..	2	2	0	Miss E. Hone ..	2	2	0
John Classon ..	1	1	0	William C. Hogan ..	3	3	0
Hon. Judge Daly ..	2	2	0	Rev. Joseph Hutton ..	2	2	0
Christopher Dempsy ..	1	1	0	John Hutton and Sons ..	2	2	0
William Disney ..	2	2	0	Doctor Henry Hudson ..	2	2	0
Thomas Donohue ..	2	2	0	William Humphreys ..	2	2	0
Patrick Donohue ..	1	1	0	Henry Higginbotham ..	1	1	0
John Donagh ..	1	1	0	William Jackson ..	1	1	0
Josias Dunne ..	2	2	0	Richard Jackson ..	0	10	6
Thomas Dwyer ..	2	2	0	James Jackson ..	1	1	0
Joseph Dwyer ..	1	0	0	Jameson and Stein ..	5	5	0
William Dykes ..	1	1	0	Edward Johnston ..	5	5	0
George Drevar ..	2	2	0	—— Jones ..	1	1	0
J. Dwyer ..	1	1	0	Messrs. Jones ..	1	1	0

METEOROLOGICAL TABLE*

FOR THE YEAR 1823.

Remarks on Weather.	Wind.	Therm.	Barom.	Date.	
This month wet to the 6th; fair to the 17th, and from 22d to the end.	Westerly to 13th. E. from 13th to 17th. Westerly from 17th to 26th.	1 55 29.83 2 56 29.84 3 56 29.73 4 50 29.87 5 53 29.46 6 52 29.82 7 52 30.08 8 58 30.11 9 57 30.18 10 50 30.25 11 59 30.24 12 61 30.23 13 63 30.23 14 91 30.17 15 63 30.02 16 62 20.87 17 63 29.62 18 64 29.55 19 63 29.73 20 69 29.73 21 64 29.74 22 60 29.94 23 60 30.13 24 65 30.20 25 66 30.19 26 63 30.21 27 66 30.13 28 65 30.02 29 68 29.93 30 63 29.87	1 48 30.33 2 54 30.08 3 54 29.92 4 52 29.76 5 51 29.74 6 50 29.77 7 52 29.94 8 54 30.04 9 62 30.12 10 57 30.08 11 54 30.09 12 53 30.25 13 56 30.19 14 50 30.14 15 58 29.95 16 58 29.90 17 65 29.81 18 50 29.70 19 56 29.76 20 57 29.97 21 58 29.54 22 55 29.60 23 55 29.52 24 57 29.20 25 57 29.53 26 56 29.55 27 55 29.56 28 55 29.56 29 55 29.67 30 60 29.79 31 57 29.73	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71
Remarks on Weather.	Wind.	Therm.	Barom.	Date.	
Wet at the beginning; thunder and lightning on the 1st; high wind to the 5th. Also wet from 10th to the 20th. Then rather fair to the end.	S.W. to 7th. E. to 23d. Stormy from 26th. Westerly to end.	1 49 30.35 2 45 30.23 3 49 30.11 4 48 29.98 5 41 29.98 6 39 30.17 7 47 30.02 8 52 30.13 9 53 30.12 10 51 30.15 11 49 30.12 12 52 30.94 13 53 30.54 14 56 30.28 15 54 30.20 16 52 30.22 17 51 30.18 18 49 29.75 19 45 29.50 20 42 29.17 21 39 29.01 22 39 29.24 23 40 29.57 24 39 29.80 25 42 29.60 26 41 29.59 27 43 29.42 28 41 29.76 29 42 29.84 30 43 30.05 31 45 30.16	1 49 30.35 2 45 30.23 3 49 30.11 4 48 29.98 5 41 29.98 6 39 30.17 7 47 30.02 8 52 30.13 9 53 30.12 10 51 30.15 11 49 30.12 12 52 30.94 13 53 30.54 14 56 30.28 15 54 30.20 16 52 30.22 17 51 30.18 18 49 29.75 19 45 29.50 20 42 29.17 21 39 29.01 22 39 29.24 23 40 29.57 24 39 29.80 25 42 29.60 26 41 29.59 27 43 29.42 28 41 29.76 29 42 29.84 30 43 30.05 31 45 30.16	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71
Remarks on Weather.	Wind.	Therm.	Barom.	Date.	
High winds from the 4th to the 7th, and from the 17th to 23d. Little rain this month, except on 20th, 21st, 26th, 27th.	The wind W. from the 1st to about the 24th. N.E. and S.E. to end.	1 48 29.94 2 46 30.17 3 43 30.15 4 49 30.02 5 47 29.75 6 45 29.53 7 42 29.40 8 43 29.11 9 46 29.23 10 44 29.35 11 52 29.45 12 53 29.39 13 49 29.31 14 48 29.59 15 53 29.30 16 49 29.25 17 48 29.34 18 48 29.62 19 50 29.86 20 50 30.01 21 48 29.90 22 46 29.78 23 50 29.63 24 48 29.65 25 45 29.60 26 50 29.93 27 51 20.08 28 58 29.99 29 57 30.11 30 52 30.88	1 48 29.94 2 46 30.17 3 43 30.15 4 49 30.02 5 47 29.75 6 45 29.53 7 42 29.40 8 43 29.11 9 46 29.23 10 44 29.35 11 52 29.45 12 53 29.39 13 49 29.31 14 48 29.59 15 53 29.30 16 49 29.25 17 48 29.34 18 48 29.62 19 50 29.86 20 50 30.01 21 48 29.90 22 46 29.78 23 50 29.63 24 48 29.65 25 45 29.60 26 50 29.93 27 51 20.08 28 58 29.99 29 57 30.11 30 52 30.88	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71
Remarks on Weather.	Wind.	Therm.	Barom.	Date.	
Heavy showers almost every day, and in general cloudy.	S.W. N.W. E. W. & S. N. & N.E. W. S.E.	1 48 29.94 2 46 30.17 3 43 30.15 4 49 30.02 5 47 29.75 6 45 29.53 7 42 29.40 8 43 29.11 9 46 29.23 10 44 29.35 11 52 29.45 12 53 29.39 13 49 29.31 14 48 29.59 15 53 29.30 16 49 29.25 17 48 29.34 18 48 29.62 19 50 29.86 20 50 30.01 21 48 29.90 22 46 29.78 23 50 29.63 24 48 29.65 25 45 29.60 26 50 29.93 27 51 20.08 28 58 29.99 29 57 30.11 30 52 30.88	1 48 29.94 2 46 30.17 3 43 30.15 4 49 30.02 5 47 29.75 6 45 29.53 7 42 29.40 8 43 29.11 9 46 29.23 10 44 29.35 11 52 29.45 12 53 29.39 13 49 29.31 14 48 29.59 15 53 29.30 16 49 29.25 17 48 29.34 18 48 29.62 19 50 29.86 20 50 30.01 21 48 29.90 22 46 29.78 23 50 29.63 24 48 29.65 25 45 29.60 26 50 29.93 27 51 20.08 28 58 29.99 29 57 30.11 30 52 30.88	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71
Remarks on Weather.	Wind.	Therm.	Barom.	Date.	
Wind high on the 4th, 6th, 17th, and 21st. Beginning of this month wet. Heavy rain on the 16th and 17th.	S.E. W. E. N.W. E. from 12th to 28th. S.W. from 29th.	1 48 30.33 2 54 30.08 3 54 29.92 4 52 29.76 5 51 29.74 6 50 29.77 7 52 29.94 8 54 30.04 9 62 30.12 10 57 30.08 11 54 30.09 12 53 30.25 13 56 30.19 14 50 30.14 15 58 29.95 16 58 29.90 17 65 29.81 18 50 29.70 19 56 29.76 20 57 29.97 21 58 29.54 22 55 29.60 23 55 29.52 24 57 29.20 25 57 29.53 26 56 29.55 27 55 29.56 28 55 29.56 29 55 29.67 30 60 29.79 31 57 29.73	1 48 30.33 2 54 30.08 3 54 29.92 4 52 29.76 5 51 29.74 6 50 29.77 7 52 29.94 8 54 30.04 9 62 30.12 10 57 30.08 11 54 30.09 12 53 30.25 13 56 30.19 14 50 30.14 15 58 29.95 16 58 29.90 17 65 29.81 18 50 29.70 19 56 29.76 20 57 29.97 21 58 29.54 22 55 29.60 23 55 29.52 24 57 29.20 25 57 29.53 26 56 29.55 27 55 29.56 28 55 29.56 29 55 29.67 30 60 29.79 31 57 29.73	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71
Remarks on Weather.	Wind.	Therm.	Barom.	Date.	
Continued storms till the 12th; again on the 17th, 18th, and 19th, and the last two or three days. A good deal of rain except the first and last weeks.	The westerly wind prevailed to 22d; then the southerly to the end.	1 47 30.18 2 51 30.03 3 52 29.95 4 54 30.10 5 54 29.91 6 54 29.80 7 54 29.29 8 41 29.77 9 40 29.72 10 51 29.74 11 53 29.69 12 56 29.99 13 54 30.32 14 49 30.24 15 49 30.00 16 49 29.62 17 53 29.97 18 46 20.38 19 49 29.76 20 54 29.84 21 53 29.61 22 54 29.62 23 51 29.72 24 47 29.39 25 39 29.21 26 39 29.28 27 46 29.53 28 47 29.90 29 53 30.06 30 55 29.88 31 45 29.91	1 47 30.18 2 51 30.03 3 52 29.95 4 54 30.10 5 54 29.91 6 54 29.80 7 54 29.29 8 41 29.77 9 40 29.72 10 51 29.74 11 53 29.69 12 56 29.99 13 54 30.32 14 49 30.24 15 49 30.00 16 49 29.62 17 53 29.97 18 46 20.38 19 49 29.76 20 54 29.84 21 53 29.61 22 54 29.62 23 51 29.72 24 47 29.39 25 39 29.21 26 39 29.28 27 46 29.53 28 47 29.90 29 53 30.06 30 55 29.88 31 45 29.91	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71
Remarks on Weather.	Wind.	Therm.	Barom.	Date.	
High wind and rain on the 7th; very heavy rain on the 14th; stormy from 16th to 23d; high winds again at the end of the month.	S.W. S.E. & E. N. S.E. & E. N.W. & W. S.E. S. W.	1 48 30.33 2 54 30.08 3 54 29.92 4 52 29.76 5 51 29.74 6 50 29.77 7 52 29.94 8 54 30.04 9 62 30.12 10 57 30.08 11 54 30.09 12 53 30.25 13 56 30.19 14 50 30.14 15 58 29.95 16 58 29.90 17 65 29.81 18 50 29.70 19 56 29.76 20 57 29.97 21 58 29.54 22 55 29.60 23 55 29.52 24 57 29.20 25 57 29.53 26 56 29.55 27 55 29.56 28 55 29.56 29 55 29.67 30 60 29.79 31 57 29.73	1 48 30.33 2 54 30.08 3 54 29.92 4 52 29.76 5 51 29.74 6 50 29.77 7 52 29.94 8 54 30.04 9 62 30.12 10 57 30.08 11 54 30.09 12 53 30.25 13 56 30.19 14 50 30.14 15 58 29.95 16 58 29.90 17 65 29.81 18 50 29.70 19 56 29.76 20 57 29.97 21 58 29.54 22 55 29.60 23 55 29.52 24 57 29.20 25 57 29.53 26 56 29.55 27 55 29.56 28 55 29.56 29 55 29.67 30 60 29.79 31 57 29.73	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71	1 43 29.70 2 49 29.38 3 49 29.57 4 49 29.63 5 36 29.71 6 42 29.78 7 40 29.75 8 40 29.94 9 39 29.94 10 35 29.68 11 36 29.41 12 43 29.45 13 43 29.39 14 43 29.55 15 40 29.64 16 43 29.99 17 49 29.65 18 55 29.85 19 54 29.96 20 54 30.00 21 54 29.96 22 50 30.05 23 51 30.23 24 54 30.07 25 47 30.02 26 47 30.23 27 47 30.35 28 44 30.16 29 52 20.85 30 52 29.71 31 49 29.71
Remarks on Weather.	Wind.	Therm.	Barom.	Date.	
A good deal of rain and very stormy to the 8th; then fair with occasional rain to the end; heavy rain on the 26th.	West from 1st to 4th, N.W. from 5th to 9th. S.W. from 9th to 12th. N.W. from 13th to 19th. S. and S.W. from 19th to end.	1 48 29.94 2 46 30.17 3 43 30.15 4 49 30.02 5 47 29.75 6 45 29.53 7 42 29.40 8 43 29.11 9 46 29.23 10 44 29.35 11 52 29.45 12 53 29.39 13 49 29.31 14 48 29.59 15 53 29.30 16 49 29.25 17 48 29.34 18 48 29.62 19 5			

MEDICAL REPORT.

“ *Pelat autem consilium medicus non a rebus latentibus (istæ enim dubiæ et incertæ sunt) sed ab his quæ explorari possunt, i. e. evidentibus causis.*”

CELSUS.

IN the last Reports* which I had the honor of submitting to the Public, from this Hospital, it was my painful duty to direct attention to the continued growth of Fever for a long series of years, and the irresistible violence with which, during the latter part of that period, it had swept over every limit that medical invention could suggest. Very different is the information which our Registry for the last year enables me to convey. I hasten, therefore, to announce, upon its authority, (as there is none more important,) that that destructive influence, which for so long a time had continued to deprive so many of our fellow-citizens of health and life, has, during the past year, wonderfully subsided.

The decrease of Disease during the course of the past year.

At the close of a period so eventful in the

* See Reports of Cork-street Fever Hospital, for the years 1820, 1821, and 1823.

history of disease in this city, as the last five-and-twenty years have been it is a matter of no trifling importance, to look back upon the peculiarities which characterised it ; and to inquire from whence they sprung, or to what cause they should be attributed. After a long and disastrous agency, disease has at last become quiescent. From the year 1804, in which this Hospital was opened, down to the close of 1827, its extent and severity had been increasing ; and as the wonderful subsidence of its pernicious influence during the past year, was so sudden and so great, as to be clearly superior to human agency, it will be necessary to proceed to explain it, as any other of the natural phenomena ; and endeavour, by comparison and induction, to arrive at the cause. It is of primary importance, therefore, to observe the circumstances which attended its rise and progress ; and secondly such as accompanied its decline.

The causes to which the growth of Disease should be attributed.

It is not to be denied, that in the last twenty-five years the condition of the lower orders in this city, has been one continued deterioration. The sources of employment have been either entirely stopped up, or most pitiably narrowed ; and the miserable artificer has been obliged too generally to support a precarious existence upon occasional charity, or some occupation, with which all his habits and inclinations are perhaps at variance. That poverty has increased no less rapidly than disease, is indeed a truth so palpable, as to need no

proof. But poverty has not been its only attendant, as will more fully appear in the following extracts;—the first from a speech of the late lamented Recorder, and the second from one by his able successor. At a meeting of the Prison Association, held at the Rotunda, on the 22d June, 1826, Sir Jonas Greene said, “ I regret to have to state, that “ crime is on the increase, and beg permission “ of the meeting to read an authentic state- “ ment on the subject, which I hold in my “ hand. In the year 1807, before the Police “ Act, (which considerably increased the cri- “ minal jurisdiction of this city) took effect, the “ indictments at what were commonly called “ Quarter Sessions amounted to 445. In 1808, “ (the period when the Police Act came into “ operation,) the number was 514.

A Scale of
the increase of
crime.

“ In 1809, ... 544	“ In 1817, ...1590
1810, ... 521	1818, ...1556
1811, ... 599	1819, ...1529
1812, ... 706	1820, ...1783
1813, ... 752	1821, ...1754
1814, ... 763	1822, ...1904
1815, ... 909	1823, ...2141
1816, ...1183	1824, ...2254

“ In 1825, the last year, 2560, of whom 1991 “ were convicted, some capitally, some trans- “ ported, and others condemned to minor pe- “ riods of imprisonment.”

At the inauguration of the Lord Mayor, on the 30th of September, 1828, Mr. Shaw stated “ that the committals to Newgate had more

Parallel between the increase of crime and that of disease.

“ than trebled within the ten years commencing 1812; that the period since elapsed had nearly borne the same proportion. In 1822, the committals were 1904. In 1827, they exceeded 3400—and within the last six months, at the City Quarter Sessions alone, he himself had disposed of fourteen hundred criminal cases.”

Now, if this scale be compared with that of disease in the next succeeding Table, it will appear that vice and disease have advanced nearly *pari passu*. This parallel would be much more striking and complete, if extended to the various systems for the prevention of vice, which have been erected contemporaneously with those intended to arrest the progress of disease; but that would be incompatible either with the scope or design of my present undertaking. I am very desirous, however, to direct public attention to such considerations, at a time when enquiry into the state of Ireland is so much needed. Political economists may learn from them, the importance of the laborious poor in upholding the social union; the necessity of preserving their numbers, maintaining their physical strength, and improving their moral habits. Whatever disappointment may at first be felt at the contemplation of the failures of many acknowledged improvements in our police organization, prison discipline, and penitentiary codes, it cannot fail ultimately to lead more directly to the true causes of our national calamities, and thus suggest more efficacious remedies than appear to have been

hitherto devised. I cannot, however, help confessing my own disappointment on finding that there has not been a decrease of crime corresponding with that of disease, in the last year, as there had been an increase nearly proportionate in the preceding years. But I believe so it has always been, and ever will be. The diseases of the mind, receiving a portion of that subtlety which characterises the object they affect, are difficult to apprehend, and still more difficult to control ;—knowledge must purify, and religion must infuse its strength through the whole intellectual frame, before we can hope to see its diseases lessened or removed.

The following Table exhibits a sketch of the history of Fever in our metropolis, made from the annals of the Cork-street Fever Hospital, from the foundation of that Institution down to the present time ;—and, whether viewed separately, or in connection with that of crime, as just now presented, we shall find, I think, that it will afford no indifferent preparation for inquiring into those circumstances in which our Epidemics had their origin, and by which their influence was extended, as well as into the peculiarities that characterised disease during the last twenty-five years. This Table is constructed in five columns, to contain—1st, The years since the Cork-street Hospital was founded ; 2dly, The number of Patients admitted each year ; 3dly, The number of those who died ; 4thly, The average mortality ; and lastly, Brief chronological observations.

The constitution of the Table which follows.

T A B L E

OBSERVATIONS.			Average Mortality	
Years	Admitted	Died		
1804	415	29	1 in 14 $\frac{9}{5}$	The Cork-street Fever Hospital, the first opened in Dublin, was confined this year to the destitute Poor, labouring under contagious Fever, in the five Parishes of St. James, St. Catherine, St. Andrew, St. Luke, St. Nicholas Without—and part of St. Nicholas's Within, of St. John's, and of St. Peter's.
1805	1024	67	1 in 15 $\frac{19}{7}$	During the last eight months of 1805, the Hospital District included all the City on the south side of the Circular Road.—See Table of Cases, in the Reports of these two years.
1806	1264	103	1 in 12 $\frac{10}{11}$	Through the whole of this Year, the destitute Poor, labouring under contagious Fever, on the south side of the Liffey were admissible.
1807	1100	92	1 in 11 $\frac{8}{9}$	Female Servants admitted this Year, and also crews of Scotchlinn, neither of which were received into the Hospital before; yet a diminution of Fever appears to have been effected in the District which the Institution embraced.
1808	1071	94	1 in 11 $\frac{1}{3}$	The manifest efficacy of the Institution in diminishing Fever encourages and enables the Managing Committee to extend it over the entire City, within the Circular Road.
1809	1051	83	1 in 12 $\frac{6}{5}$	The farther decline of Fever enables the Committee to receive all Applicants of every condition in society, who laboured under Fever in the City. The diminution of continued Fever in the City, so remarkable in this Year, was accompanied by an unusual prevalence of Ague, particularly in the Spring Months.
1810	1774	154	1 in 11 $\frac{40}{7}$	The increase of admissions this year took place chiefly during the last eight months of it, and was apparently connected with increased activity of contagion, both in Dublin and several parts of the country.—Crises still remarkable in Fever.
1811	1472	115	1 in 12 $\frac{1}{11}$	The reduction in numbers and mortality this year was fairly attributable to the external and internal means employed at the Cork-street Institution.
1812	2265	166	1 in 13 $\frac{0}{10}$	Fever, of the type of 1810, becoming again more virulent and contagious, requires an extension of the Building of the Cork-street Hospital, so as to meet the increased pressure of Applicants.
1813	2627	164	1 in 16 $\frac{3}{16}$	Fever this year, characterised as in 1810, increases, notwithstanding the additional preventives opposed to it.
1814	2329	143	1 in 16 $\frac{10}{11}$	The distinct forms of continued Fever, during this and the preceding year, indicate distinct modes of cure for Idiopathic and for Symptomatic Fevers.—See my Treatise on Fever—Edit. Lond. A. D. 1814.
1815	3789	187	1 in 20 $\frac{49}{17}$	The number of Beds provided at the Cork-street Hospital, were this year increased from 80, with which it was first opened, to 150. The diminished mortality during this and the two succeeding years, was attributed to early applications from those infected with Fever, as well as the distinct modes adopted of treating Typhoid and inflammatory Fever.
1816	2703	173	1 in 15 $\frac{16}{13}$	The diminution of Fever this year is the more remarkable, as, from the constant cold and wet prevailing and injuring or destroying the crops, it was the harbinger of succeeding famine, that was felt throughout all Ireland.
1817	3032	231	1 in 13 $\frac{17}{12}$	Famine not felt this year in the metropolis, as in other parts of Ireland, owing to the Poor being better supplied, by the judicious and humane, with food and fuel. Its effects, in increasing the growth of Fever, were, therefore, not in the same degree, as appears by the admissions into the Cork-street Hospital.
1818	7608	258	1 in 30 $\frac{12}{25}$	Many other Fever Institutions, in the various quarters of the city, were this year crowded with applicants suffering from Disease or Famine, separately or conjointly—in the latter case producing a new form of Fever. See Report for the Years 1820 and 1821.
1819	3873	224	1 in 17 $\frac{13}{12}$	Many of the largest Fever Hospitals erected during the two preceding years were now permanently established; so that the admissions to this Hospital then and afterwards mark only a proportion of the increase of disease in Dublin.
1820	2974	203	1 in 14 $\frac{13}{10}$	The distinct nature and form of Fever, produced by contagion, by famine, by Malaria, and by the continuation of these causes, became each year more obvious, as was intimated in my Report for the years 1820 and 1821, already referred to.
1821	2973	246	1 in 12 $\frac{17}{16}$	The increase of the average mortality this year indicates the increased tendency, in the epidemic constitution, to produce Typhoid, rather than Inflammatory Fever.
1822	2307	137	1 in 16 $\frac{12}{17}$	The diminution of the admissions and of the average mortality this year, marks a decline of Fever, which was observable in other parts of Ireland, as well as in Dublin.
TOTAL	46361	2869	1 in 16 $\frac{57}{256}$	The Total of the admissions, deaths, and average mortality, to the close of 1822 is given here, that it may be compared with the same events during the three succeeding years, in order to show more clearly the commencement of that Epidemic Fever which has since prevailed with peculiar characteristics and mortality.
1823	2663	241	1 in 11 $\frac{17}{11}$	In my Pathological Observations, and also in my Report, published in 1823, I described the pestilential Fever that then prevailed; and I heard, even that the success of great surgical operations appeared to be interfered with by it; and, both here and in the sister kingdoms, fatal attacks of Fever followed punctures received during the dissection of bodies at the Anatomical Theatres—attacks which were decidedly Typhoid.
1824	4599	327	1 in 14 $\frac{40}{127}$	Not only lebric Diseases, but most others, were marked by the malign influence of the epidemic constitution that now prevailed; and I heard, even that the success of great surgical operations appeared to be interfered with by it; and, both here and in the sister kingdoms, fatal attacks of Fever followed punctures received during the dissection of bodies at the Anatomical Theatres—attacks which were decidedly Typhoid.
1825	3878	381	1 in 10 $\frac{18}{11}$	The pestilential characters of the Epidemic of 1823 continue, and erysipelas phlegmonides, dysentery, yellowness of the skin, glandular swellings, partake of the malign influence. Dropsy continues to be a frequent sequel to Fevers, and a spurious form of phthisis, which first appeared most remarkable to me, in 1823.
TOTAL	11145	949	1 in 11 $\frac{49}{16}$	The increased malignity of Fever, as indicated by the mortality in the last three years, is remarkable; and it is deserving of record, that in the diseases of cattle, particularly of horses, a still greater degree of mortality was observable; also considerable similarity in the symptoms, such as dark spots seen on those parts not covered with hair, glandular enlargements, and gangrene both internally and externally.*
1826	10882	386	1 in 28 $\frac{1}{2}$	The pestilential Fever of 1823 still continued, and caused great mortality in Dublin during the year 1826. Those labouring under the artificial famine, produced by dearth of employment for the working classes, giving increased predisposition to be affected by the epidemic constitution, which had been previously established. The diminished average mortality, which appears to have taken place at this time, was owing, perhaps, partly to early application, but chiefly, I am sure, from numbers crowding to the Hospitals without positive Disease.
1827	6544	344	1 in 19 $\frac{13}{14}$	Fever still prevailed under its pestilential form, and I believed continued to be as mortal to those affected with it, though the pressure into the Hospitals of numbers in want of sustenance, who did not labour under regular Fever, reduced the average mortality so much below what it had been during the three first years, commencing with 1823, the year in which our indigenous Fever assumed a pestilential form.
TOTAL	17426	724	1 in 24 $\frac{50}{17}$	If we compare the Total and the average mortality for these two years, with those of the preceding three years, we may, perhaps, form the best estimate of the number of those admitted, who actually laboured under the prevailing epidemic constitution.
1828	2964	193	1 in 15 $\frac{6}{13}$	The reduction of admissions into the Cork-street Hospital, which took place this year, would have been much greater, but from the numbers in agues and eruptive diseases, who, besides those in common Fever, were also admitted. A great proportion of those who died in the Hospital this year laboured under chronic and incurable diseases, before admission; and a much greater proportion than usual of the deaths occurred shortly after the Patients removed into the Hospital.
TOTAL	77866	4736	1 in 16 $\frac{19}{13}$	

* A comparison between the effects of the epidemic constitution on the diseases of man and other animals, has always been found highly instructive to the pathological inquirer; and from the advantages I lately derived from the few opportunities I could avail myself of, I cannot but regret that such modes of investigation have not been, of late years, more generally attended to. In comparing the symptoms of lebric diseases in man, with those in horses, the resemblance is most striking; and the *post mortem* examinations in both equally indicate the nature of the disease: but there are some peculiar advantages to be derived from tracing the effects of disease in the *post mortem* examination of horses. 1st, The *sectin cadaveris* may be made more speedily after death, than would be warrantable with a human subject. 2dly, There being seldom more than one set of organs engaged, the symptoms and the appearances found after death are less complicated, and hence their *rationale* more explicable. From our eminent Veterinary Surgeon, Mr. WATTS, I learned, that in 1823 a putrid Fever prevailed among the horses of Dublin and its vicinity, such as he never had before witnessed. Several cases of it occurred, too, in 1827, and likewise in the past year; three of which, with the examination after death, will be found in the succeeding pages. The blood drawn was broken down and corrupted. Bleeding always hastened death, which, however, generally followed such an appearance of the blood as just described. The nostrils, tongue, and every part with displanous membranes, were covered with dark spots. The glands became enlarged and gangrenous, and gangrene to a great extent, with a loss of immense quantities of flesh by sloughing, often preceded death. On opening the bodies of the horses which died with such symptoms, beptization of the lungs and gangrene of the viscera were often discovered, and the blood dark and fluid.

This synoptical retrospect of the rise and progress of Fever, as it appeared at this Hospital, is a document of much melancholy interest. The head and foot of the column of admissions, form so fearful a contrast, and show so rapid an increase in the number of sufferers, that it must excite in us a distressing surprise: this feeling will be heightened perhaps when it is known, that at those times, when the numbers relieved by Hospital assistance were greatest, it also happened that the members to whom the Hospital, from its limited accommodation, could afford no assistance, were also greatest. It may further be observed, that there has been a continued increase of Fever for the twenty-four years ending in 1827—comparatively slow indeed for the first seven, but alarmingly rapid and irregular during the subsequent seventeen.

The actual increase of Disease far greater than that exhibited by the Table.

However great the increase which is thus exhibited may appear, it is far from being so great as that which actually took place. During the early years to which the table refers, the Fever Hospital in Cork-street, was the only one existing in Dublin; and consequently, the applications to *it* were *all* that were made for Hospital relief: but subsequently, a number of other Fever Hospitals were erected in various parts of the city; so that when the numbers on the above column of admissions were greatest, they represented only that portion of the increase which was provided for by one, out of the many existing Fever Hospitals.

As the reader may now form a tolerably accurate estimate of the actual increase of disease, and has been reminded of the moral and physical condition of the lower orders, while that increase was going on—he will be desirous perhaps to be informed how it is to be accounted for.

The increase of Disease proportionate, though rapid down to 1817; it then became irregular.

Upon reference to the table, it will be observed, that from the year 1804 to 1817, there was comparatively speaking, a gradual, though during the latter part of that time, a rapid increase of disease : but it was not till 1817 and 1818, that it appears, as by some extraordinary effort, to have made a sudden and terrible inroad upon the health and happiness of the people. In the year after, however, it seems in some degree to have subsided, and taken the more regular order of increase down to the close of 1825, when apparently it again resumed extraordinary violence, and inundated with misery all the habitations of the poor.

The common admission respecting the general increase of Disease.

With respect to the increase of disease, down to the year 1818, it is, I believe, generally acknowledged, that it was the extension of the same form of Fever, to which the increased poverty and helplessness of the people, rendered them more liable. But to account for the extraordinary increase in 1818, and likewise in 1826 and 27, different opinions have been entertained, and different causes have been assigned. These differences shall now be

detailed :—it being first premised, that as the extraordinary increase of disease in the years 1818 and 1826 were, by their manner of appearance and departure identified, or at least as the *differences respecting them* were the same, it will not be here necessary to treat them distinctly.

The different opinions concerning the extraordinary increase.

When disease had advanced to so dangerous a degree as to excite very general alarm, and government found it necessary to institute inquiries, a letter was addressed by the Secretary of the General Board of Health, to the physicians of the Hospital. It requested their opinions as to the *cause*, the manner in which it acted, and the most probable method of removing or counteracting it.* As the answers returned to these questions were likely to direct in a considerable degree the measures about to be adopted by the Board, it appeared that the duty thus required, was one of no ordinary responsibility. It was therefore with exceeding regret that I found myself *differing* from my colleagues, while it was impossible to compromise my belief. *They* were of opinion, that contagion had “acquired *within a short period* more than ordinary force;” and that it was owing to this circumstance chiefly that so

* See Appendix, No. 1, for the Letters, in the correspondence between the Secretary of the General Board of Health, and the Physicians to the Fever Hospital, and House of Recovery, Cork-street.

many were afflicted; while I believed that disease had been extended almost entirely by the miserable condition of the people. The power of contagion was not indeed to be denied; but that the increase of sickness was in consequence of the increased force which contagion had gained within a short period, or that it owed its origin to contagion at all, was what my experience seemed to contradict. As the settlement of this difference is of paramount importance to subsequent inquiries, there shall be here laid before the reader those considerations, upon which I hope to justify the singularity of my opinions.

The completeness of the preventive system, over which disease has nevertheless advanced.

The system of prevention, over which disease has swept with irresistible violence, has long been the subject of praise and admiration. In its formation, no expense was thought too great, no labour too severe; and in its completeness and extent it might rival the speculations of fancy, and is certainly far superior to any other heretofore established. Hospitals of extraordinary accommodation were erected in various quarters of the city with a despatch which might well call forth astonishment. The infected were immediately removed from the healthy—their habitations cleansed in the most complete manner, to prevent contagion or malaria. In the poorer parts, the streets were conveniently widened, and fountains giving a supply of excellent water were erected, for all the cleansing and culinary

purposes of the inhabitants. But it will be remembered, that when this Fever Hospital was opened, it was *the only one* in Dublin; and that so it continued for some years. During that time, it will be seen by a reference to the table, that disease was more effectually restrained than at any subsequent period. Now, disease was as decided in its character, as contagious and as fatal *then*, as it appeared for several years afterwards; for by general acknowledgment, it was the same continued form;—and yet one Hospital, at that time of very limited accommodation, when compared with its present, and with a system of prevention comparatively crude, was able to repress the influence of contagion.* It follows as a necessary consequence, that if contagion had continued to act alone, this slender apparatus had been all that we required.† The reader will easily perceive that this conclusion has been drawn, not so much on account of its own importance, as for the information which it indirectly conveys. First, contagion was not the cause of the increase of disease; it was merely supervening, or accidental. Secondly, it is to that increasing poverty which caused such increasing exposure to the attack, and such increasing sen-

When disease was in any degree restrained, there was only one hospital in Dublin!

Inference from these facts.

* See a succinct account of the Contagious Fever of this country, exemplified in the Epidemic, now prevailing in London, &c. &c. By Thomas Bateman, M. D. F.L.S., &c.—*London*, 1818.

† A much more slender apparatus has since been found sufficient to arrest contagion in London, after its existence, and active agency had been proved by ample evidence before the House of Commons.

sibility to the effect of contagion, that the increase of disease is properly to be attributed. But what is the fact? The advance of poverty and disease have been contemporaneous; and if this be kept in view, it is difficult to perceive how an ordinary understanding can refuse to assent to the justness of the argument. I say this in reference to the general increase of disease, without any regard to the particular years, 1818 and 1826. And the reader will not imagine, that any attempt has been hereby made to deny the existence or prevalence of contagion; for my argument goes to prove, that contagion did indeed prevail, *but not by its own power*—it was the tooth, but terrible only because in the jaw of the hydra.

Causes of different opinions assigned.

Now, in the years 1818—1826, it was believed by many, whose opinions are certainly well entitled to respect, that the extraordinary influx upon the current of disease, was owing to the appearance of *some new epidemic, and the suddenly increased force of contagion*. The grounds of their belief appears to be, that it was difficult to assign any other cause for the prodigious numbers of the sick—and that after dismissal from Hospital, relapses were not unfrequent. But in matters of this nature, although it is very true, that extraordinary phenomena are to be attributed to extraordinary causes; yet, error will be most likely to prevail, if we attempt to explain rather by what might be, than what is—or, in other

words, if we consult our ingenuity for a reason, rather than search through facts for the cause. The intellectual acuteness of a philosopher is one thing, and the patient drudgery of the practitioner is another—the one is the grander and more captivating; but the other is not less useful for its dulness. To the latter only, if indeed to either, can I venture to make any claim. Experience forms my theory—my chief argument is the display of facts. If then, the doctrine just alluded to, be tried by this test, I believe that it will fail; since it would appear, that the facts on which it seems to rest will maintain an opinion not only different, but contrary.

It has been already seen, that the general increase of disease was produced, not by contagion, but by misery; and the amazing power of the agent must have been recognised in the agency. When, therefore, the question is asked, was it not probable that, in the years 1818 and 1826, misery was the cause of the unprecedented increase of sickness? Is it possible to answer in the negative? Certainly not—since its previous agency had proved its power unlimited: and if at a further step it is asked, does not the greatness of the number point to misery as the cause?—it cannot be denied, that previous experience and probability are on the side of the affirmative. The very same may be said of the relapses. But if it should appear, that the character of the increase was of

a very peculiar nature, and requiring a very peculiar treatment—and that these peculiarities do not only favour, but insist on the belief, that misery was the cause, can any doubt remain? That such is the fact, no other proof shall be given than the particular statement of the facts themselves.

The distinctions between the two forms.

The peculiar symptoms of that sickness which, during the years 1818 and 1826, formed the extraordinary increase, consisted chiefly in a pallid and anxious countenance, a chilled or parched skin, keen sense of hunger, extreme dejection of spirits. Such were its symptoms. It must be unnecessary to observe, that these symptoms differ from those of positive disease, rather by deficiency than contrariety, as violet differs from yellow, or one from five.* Besides this general distinction, however, there is one contrariety, viz—in the one case, there was a

* The result of a visit by two English Physicians, in the year 1817, seemed to me of so much importance, that in my Report for the years 1820–21, I stated it at the foot of page 42, in order to show how few of these in the Hospital in that year, laboured under any of the real typhoid symptoms that generally characterise the indigenous Fever of Dublin. I may here advert to a similar circumstance that occurred in 1826. That distinguished French Surgeon, Baron Larrey, being then in this city, paid a visit to ours and the other Fever Hospitals; and as I learned, he enquired especially after those bubos gangrenes, and other attendants or consequences of bad Typhus Fever, which, in his conception, were necessarily the leading objects of his solicitude. On his examination, however, at the bedside, in our Fever Hospitals he often expressed his surprise, when on drawing back the covering, in a large proportion of the cases, he perceived not the symptoms of Typhus Fever, but those of starvation.

keen sense of hunger, in the other nausea. This deserves to be noticed more particularly, because it showed not only a positive difference in the existing symptoms, but also a positive difference in the origin of the disorder: for, according to general experience, wherever there has been contagion, there must be nausea. Not indeed that where there has been no contagion, there can be no nausea; but that where there is no nausea, there can have been no contagion.

The intermissions and paroxysms which universally attend malaria, are too remarkable to allow, even for a moment, the supposition of their identity with the sickness in question.

Whenever, indeed, the sufferers from famine are exposed either to contagion or malaria, which have been so long rivals in their pernicious agency amongst our poor, then, bodily and mental exhaustion giving a powerful predisposition to be affected; symptoms succeed, such as frequently characterise the Fevers produced by either of these morbid causes. Very often, too, as may be supposed, under circumstances so favourable to the generation of contagion, it springs up spontaneously—and hence, pestilence frequently succeeds to famine. But I have generally found that where Fever arises from any other cause than privation of food, the effects can be as generally recognised in the characters of

the disease ; the typhoid form, in a greater or less degree, succeeding exposure to contagion ; whilst ague, in some of its types, succeeds exposure to malaria.

The distinctness of the symptoms, arising from distinct causes of Fever, may be further illustrated by the fact, that the nursetenders of the Hospital, on receiving successive patients, and in contagious Fever, from the same family are able, by describing the preceding cases, accurately to foretel a similar train of symptoms. Of the distinct natures of Fever from contagion, and from malaria, another illustration is afforded by the preceding Table. It may be perceived, that in those years when from contagion Typhus Fever was most prevalent, agues were little or not at all known ; whilst in other years, as in 1809 and 1828—in which the subsidence of continued Fever was most remarkable—the frequency of intermittents was also most remarkable. I am the more desirous to dwell on these distinctions, from being persuaded that the great discrepancy of opinion which has for some time existed among the Physicians of Great Britain and Ireland, on the subject of contagion and malaria, has arisen chiefly from want of due attention to the effects of those agents separately, and also from confounding them with those from other causes. To that confusion, probably, may be attributed the many pernicious mistakes which have taken place, both in devising

means of prevention and in prescribing modes of treatment for febrile diseases.*

With respect to the treatment, it is to be observed, that, as there were different opinions on the nature of the sickness, so were there different modes of cure adopted. Those who looked upon it as a new epidemic, of course treated it accordingly. The success of their mode of prevention appears not to be favorable to such opinions.† The success of their curative treatment I do not pretend to know; but if there be any truth in rumour, it differed

Adoption of different modes of treatment the result of different opinions.

* In the Newspapers of 6th, 7th, and 8th Dec. last, see notice of the remonstrances of the French Physicians with their Government at sending none but ultra-contagionists, to enquire into the causes of the pestilential Fever then prevailing in Gibraltar—remonstrances with which I entirely accord and sincerely sympathize.

† For the preventive as well as the curative treatment, it is of the first importance to hold these distinctions in view. Both in 1818 and 1826, food, warmth, and hope, effected certain and rapid recovery in a large proportion of the cases presented to the author, whether in the Hospital or out of it; and when the sympathy of the public was excited by the appeals made by the Relief Committee in 1826, he stated, that the most effectual mode for preventing “so frightful an increase of the calamity as might be produced by the addition of contagious disease to the ravages of famine;” would be to oppose them separately by appropriate remedies. As one of the parishioners convened in the Vestry-room of St. Peter’s Church, to consider the same subject, he there stated those opinions which must have been known to many who had co-operated with him in 1818, not to be merely speculative, but founded on the success of a plentiful supply of provision, fuel, and bedding, for those suffering from famine in that year and of sending such of them to the Hospital as were in positive, Fever. In 1826, it was found necessary to have recourse to similar modes, even after 1400 beds were stated to have been provided in the Fever Hospitals of Dublin, for the reception of patients, a greater number by 400 than that which existed during the famine-fever of 1817 and 1818. And it should be observed, that famine then prevailed all over Ireland.

greatly from that which marked a different mode. In the latter case, it was regarded as the mere sickness of misery, and was immediately and most effectually relieved by nourishment, a dry bed and comfortable apartment. The average mortality which ensued, affords satisfactory evidence, as the reader may perceive by looking back to the column of deaths in the Table, during the years 1816-17-18-23-24-25-26-27-28, and, comparing it with the column of admission in these years. That the sickness arising from famine was distinct in its nature, from that arising from positive Fever, and pointed to distinct treatment, will be still more clearly seen from Tables given in succeeding pages, which will show the average length of time which patients remained in the relative years of famine, compared with other years.

The character and treatment of the *extraordinary* increase of disease.

If, then, the peculiar character of the sickness was no more than hunger and exhaustion, and if its cure consisted in feeding and warmth, and comfortable lodging, to what cause does the nature of this redundancy of sickness—if the expression is allowable—its point? Surely to misery, and misery alone.

State of the country an additional proof.

But if any thing were wanting to entire conviction on this matter, a brief survey of the condition of the poor, during the particular years, and those immediately preceding them, will painfully satisfy the want. The incidents

which characterised those years, will long remain in mournful recollection. All the evils which had been growing for many years before, in a terrible aggregate of strength and number, then appeared in this country ; the proprietors of the soil had long been deserting it, and spending in other countries the income from their estates. Hence, immense tracts of reclaimable land lay neglected wastes, which otherwise might have brought large returns of wealth for the expense of their improvements, and become rich sources of employment, health and contentment, to those who are so unjustly treated as intolerable incumbrances on the small proportion of the country which is duly cultivated.* Those lands, therefore, were divided and sub-divided, with little care for the interests of agriculture, and still less for the happiness of the people :† and while the land was racked, and the various denominations of unfortunate tenants pressed to make up the rents for the absentee ; the poor artisans, whose existence depended upon the liberal encouragement of the resident nobility and gentry, sunk into poverty and vice. Truly has it been said, “ It is the state, the luxury, and fashions of the wealthy that give life to the artificers of elegance and taste ; it is their nu-

* See “ An Essay on the Population and Resources of Ireland,” By Whitley Stokes, M. D. Senior Fellow T.C.D., &c. &c.

† See a small Pamphlet, entitled, “ A Statement of some of the Causes of the Disturbances in Ireland, and of the Miserable State of the Peasantry, &c. &c.”—*Dublin*, 1825.

meroustrain that sends the rapid shuttle through the loom ; and when they leave their country, they not only beggar their dependants, but the tribes that live by clothing them.”* The importance of this high authority is well illustrated by the fact. The habitation of the miserable weaver became a spectacle of filth and confusion—his hearth cheerless—his only visitor the cold and wet which made its way through the ill-saved roof, his helpless infants famishing around him, and thus learning to regard all the energies of his manhood as useless, and his loom but lumber, he often sunk down in mental agony, and bodily exhaustion. In such a plight, it may easily be imagined, recourse was had to any and every means : every vice was resorted to which could either intoxicate affliction, or destroy sensibility. Thus it was that disease procured another agent, no less terrible than that from which it sprung. It was no unfrequent spectacle to see his whole family, a wretched group, *οψη μεταμανθανοντες την ελευθεριαν*, coming down to the Hospital gate, or carried thither in the vehicle for that purpose, severely sick indeed, but bearing the symptoms of no other malady but that of cold and hunger ; nor was their condition less necessary to be attended to than if they had laboured under a more regular form of disease.

* Mr. Moore states, that the manuscript of the pamphlet on absenteeism, from which the above quotation is taken, was written by Mr. Sheridan, in the year 1778.—See Life of the Right Hon. R. B. Sheridan. By T. Moore, Esq.—Vol. i. p. 286.—London, 1825.

Upon subjects not strictly medical, I speak neither willingly, nor perhaps scientifically. Philosophers declare, that absentees do no injury to a country ; and those who are absentees, may pride themselves for their philosophy. But when speaking of those causes to which the fearful increase of disease in this city, for the last eighteen years, is to be referred ; I feel it my duty to risk my character as a scholar, while I state my experience, and declare, that from close observation of the course of things in this country, it is my firm conviction, that the miserable state of our *retail* trade, is the immediate cause, and that *it* has been the effect of the absenteeism, and the introduction of machines, *without capital*, which therefore [turned their powers against manual labour at home, without in the smallest degree reanimating an expiring commerce. This conviction is here stated, because it is the result of experience ; that it will scarcely meet with approbation, is easy to foretell ; but certain it is, that absenteeism and machines, the loss of trade and poverty, vice and disease, have worked in frightful accordance.*

* When speaking of the effects of machinery on the prosperity of Ireland, the author would not be understood to go the whole length of the ingenious Genevese Professor, Pictet. The injury spoken of above, results not from the introduction of *machinery*, but of *machinery without sufficient capital*. The Professor's remarks, however, are so ingenious, and supported by such important facts, that it might be improper to omit them :—

“ Let us now (he continues) examine our account. On the one side, a nation grows rich, or seems to grow rich—on the other side, a

The scope of the preceding etiological discussion was chiefly confined to two objects ; first, to show by a narrative of facts, how far the sketch we have been considering might be deemed a true scale of the advance and decline of disease in Dublin ; secondly, by a statement of remarkable events to assist in discovering how far these events, taken in consecutive order, might be esteemed to be in the relation of causes and effects. I must now leave to others to decide how far these objects have been attained, or how far I am justified in assuming, that the column of

mass of evils of the most serious kind overflows society. On which is the balance ? Certainly on the side which is unfavourable to the general happiness, which is the natural averred object of every Association.

“ But let us examine a little closer the apparent gain, the pretended prosperity of the nation using machines :

“ The wealth produced by manufacturers accumulates ; but in the hands of an inconsiderable number of individuals, comparatively to the whole mass. The man enriched by the machine, employs his gains in multiplying the sources of his fortune ; and the value of the manual labour of the poor workman declines in the same proportion. Hence the rupture of the equilibrium between the two extreme classes of society, increases more and more. The first sees its treasures increase, the latter its numbers and its misery. These two progressions, so divergent, have a term which must inspire terror.

“ And if in the nation thus enriched, a radical defect in the legislation, imposes on one part of the population the *necessity* of maintaining the other ; then, to the causes of increasing poverty in the latter, which we have just pointed out, is added the fatal and anti-laborious influence of all these measures, which, preparing succour for indigence, whatever be its source, concur with idleness and the want of education, and resources ready prepared, really to propagate this indigence, when it is intended only to relieve ; then, in short, in proportion as the nation thinks it grows rich, the tax imposed on those riches increase in perhaps a still greater proportion ; and the rich and the poor both suffer ; the former without saying so,

deaths in the Table, viewed in connection with a similar proportion of mortality in the other Fever Hospitals, which have been since erected, is a tolerably accurate scale of the advance of disease. And I shall next proceed to inquire into the nature and symptoms of that disease, as illustrated by the nature of its exciting causes—the constancy of its increase, both in extent and virulency, for so long a period as the Table defines.

In its general characters, the common Fever of Ireland appears to have preserved its identity of continued Fever at present, and at remote periods.

or saying so only in whispers; the latter demanding succour with an importunity which resembles menace.

“That we may not be accused either of exaggeration, or of bringing forward an imaginary theory, we shall support it by facts, which are acknowledged and deplored in all England. It is the rapid augmentation of the Poor Rates, in proportion as the pretended national wealth has increased. The following is a statement of it, at six different periods: the first interval is nearly a century; the others are of 8, 18, 7, and 6 years, in the period when the employment of machinery was the most active.—Account of the Poor Rates of England from the year

1685	....	665,362	
1776	....	1720,316.	Interval of 91 years.
1784	....	2167,749.	Interval of 8 years.
1802	....	5313,000.	Interval of 18 years.
1809	....	7000,000.	Interval of 7 years.
1815	....	8164,496.	Interval of 6 years.

“Number of persons relieved permanently on the average of 3 years—

“1813, 14 and 15, out of the Work-house	....	423,678
“In the Work-house	.....	93,141
“Occasionally Relieved	.....	423,158

“Total Number of Paupers relieved 939,977.”

If this be so in *England*, what would be the case here !!

tity from very remote periods, as I have endeavoured to show in my two last Reports from the Fever Hospitals and House of Recovery, Cork-street,* by comparing its symptoms as observed in that Hospital, with the descriptions left by the earliest and best medical writers which this country produced, particularly Doctors Boat, Rogers, and O'Connel. In tracing the rise, progress, and decline of the indigenous Fever of Dublin, by the outline which has been marked out, I may now, therefore, confine myself chiefly to the peculiarities which distinguished it during the periods embraced in that outline—peculiarities which we shall find were not only connected in the first instance with the nature of the exciting causes, but afterwards proportioned to their degree.

Fever more of an intermittent and a remittent type previous to the year 1804, than it has since been.

Previously to 1804, the Fever of Dublin appeared to me, both from what I learned in the Clinical Lectures of the Professors, especially those of Dr. Percival, and also from my own observation, as physician to the Dublin General and Meath-street Dispensaries, to have much more of the characters of intermittent and remittent Fevers, than they afterwards had, and (on another occasion I have mentioned) those diurnal revolutions which probably induced Dr. Cullen to make "*paroxysmis quovis die binis*,"

* See Medical Report of the Fever Hospital and House of Recovery, Cork-street, Dublin, for the years 1820 and 1821. Also a Report from the same Hospital for the year, 1823. Pp. 20, 21, 22.

a part of his definition of continued Fevers, have not been so remarkable since as they were before that period. This change in the characteristics of continued Fever, is referable, I think, to certain modifications of the exciting causes; the *malaria*, as the Italians call that state of the air which produces intermittents, having formerly had a greater share in the “*Constitutio Epidemica*” than contagion, one of the principal sources of Typhus Fever, has had of late years. This conjecture is rendered more probable, when it is recollected, that the situation of our city, near a strand occupied by the tide but a small part of each day and night, makes it always liable to the effects of malaria : and, further, because these effects have been always most remarkable during the prevalence of east winds, which possibly in some measure, owe their pernicious influence to the ingredients they imbibe in traversing that strand, and waft towards its western margin. On the other hand, the density and poverty of the population, especially in the Liberties, that part of the city most remote from the sea, appears to have been the origin of a morbidic and debilitating contagion that produces Typhus Fever, by which those periodical movements which characterise Fever, when produced by malaria, have been rendered less observable, in proportion as the peculiar symptoms of Typhus have been more fully developed.

The probable causes of the different forms of febrile disease.

In tracing our Epidemic Fevers, under the

Commence-ment of what is termed the new epidemic constitution, new constitution,* (as Sydenham would have called it,) which commenced about the beginning of the period included in the sketch just now given, their peculiarities gradually appear more and more manifest through successive years, just as the Epidemic diseases acquired more of the Typhoid and less of the intermittent tendency or form; and when those of the latter form began to exceed their former bounds in number and severity, then intermittents were scarcely to be seen, and vice versâ: thus, until 1812, (but particularly in the year preceding it,) intermittents were frequent, and periodical movements, especially crises on particular days, were noticed in the successive reports. Latterly, however, and especially since the commencement of 1823, these periodical movements in the symptoms of Fever have been much less observable.†

* Postremo observandum est, quoties constitutio aliqua varia Epidemicorum species parit, singulas has species genere ab illis differre, quæ cū idem planè nomen sortiantur, alia tamen Constitutione generentur.”—*Sydenham de morbis Epidemicis*, page 25.

† I willingly take this opportunity to acknowledge the aid I have derived from Dr. M'Culloch's valuable work, lately published on malaria, in confirming my former opinions as to its agency in the production of these remittent and bilious Fevers, which, as already stated, are frequently confounded with contagious Fevers; further, by leading me to perceive, that many forms of diseases are attributable to it, which before had been deemed either anomalous, or the result of some other external or internal injury. Many instances of this kind both in Hospital and private practice, have been brought to my recollection; but I must confine myself in this note to a very curtailed statement of what occurred within the past year in a single family.

A gentleman and lady, little more than thirty years of age, and

In stating these facts, however, I would by no means be understood to argue for the universal agency of contagion, even during the

married seven or eight years, resided during the summer months of 1826 and 1827, at their country seat, beautifully situated about four miles south of Dublin, and considerably elevated above the adjacent grounds, which ascended to the mountains at some distance behind : the mansion itself was deeply enveloped in trees, with luxuriant foliage, except at the front, which had an eastern aspect, where there was a deep-standing lake of considerable extent, and surrounded by an extensive shrubbery. Previously to 1826, there had been no complaint of indisposition ; and even up to the close of the summer of 1827, the attacks of the preceding year were so slight, as nearly to have escaped their recollection. Towards the close of the month of July, however, the weather being humid, and rain frequent, I was first consulted by the lady, on account of a violent attack of hysteria, connected with biliary derangement, succeeded by Fever, great mental anxiety, and some cough. The Fever had exacerbations at mid-day ; and in the evening for several days, and severe gastrodynæa, which was felt more or less from the commencement of the attack, as well as severe pain from the uterine region, which, mutually sympathised, and were always increased during the exacerbations. Under ordinary treatment, which it is not necessary here to detail, recovery was progressive, but tardy and not complete, during the remainder of the autumn passed at the country residence ; the attacks being renewed with increased severity, and succeeded by symptoms of increasing delicacy of health. Pain of side, cough, and emaciation had now assumed a threatening aspect, when the family moved into their town residence for the winter. Recovery now without any material change of treatment, advanced much more constantly and steadily than before, though with slight interruptions from obvious causes ; and in the opening of the succeeding spring, was so much better, that she ventured of her own accord to return to her country residence, where, in a short time, all her former symptoms returned, so that, by my advice, she returned to town, and again experienced the same relief as she had done in the beginning of the winter. In the beginning of May, the trees immediately about the house having been previously thinned, she made another trial, but still more unsuccessfully than before, as her delicacy of health rapidly increased, and cough, pain of side, and emaciation, had arrived at so great an extent, that about the 16th of May, I advised her removal

Epidemic constitution of the last twenty years, to the exclusion at all times of malaria ; on the contrary, I am persuaded, that there have been many instances, in which bilious and intermittent Fevers have been produced by malaria, in large families and districts, and that the attacks so produced have been unjustly attributed to contagion, owing to the debility impressed by those physical and moral causes in which contagion itself has its origin, and that by such debility, the force of those natural efforts was lessened, which otherwise would render paroxysms and crises in Fever evident. These considerations, however, will be again resum-

to Bristol, and to pass the summer between that and Cheltenham, or Leamington ; and I am happy to say, that her health has progressively improved since she commenced that plan, and that she returned in the October following, perfectly restored. As there could be no question in this case, of the indisposition being the effect of some cause connected with the country residence, I have given this brief detail of it, and shall only add in corroboration of this view of the cause, that the gentleman himself also, and all their female servants, who resided constantly either at the mansion or gate-lodge, were attacked successively during the same period with symptoms of bilious Fever, and neuralgia, though not in precisely the same parts of the body ; and that these attacks subsided on change of residence. As there were but two causes of the unhealthiness of this situation, viz. the lake, and the density of the trees, I have no doubt, that if the lake, as might easily be done, be rendered a current stream, and the trees be still more thinned, that it will be afterwards found a healthful residence ; an opinion which I express more confidently, from my experience in another instance, which occurred in the same neighbourhood. A friend of mine had a small but deep lake in his demesne, near his house, which also was enveloped in trees, and for many years experienced the sickness of some members of his numerous family, sickness which was relieved only by change of residence, until 1826, when the lake was dried up, and the trees near the house cut down—ever since the family have enjoyed good health.

ed, when I come to treat of the Pathology of Fever, as it respects the *Constitutio Epidemica*.

The peculiarities of our Epidemic constitution appear to me to be indeed eminently deserving of the attention of physicians, not only as regards the differences between the nature and symptoms of febrile diseases, at former periods and at present,^a but also as regards those differences between them, in this and in other countries, which less probably arise from differences of the primary causes. Being persuaded that inquiries on this subject would lead to practical results of great importance, I shall quote a few of the leading characteristics of the common Fever of London, from the description of it given in 1818, by the late Dr. Bateman, in order that these characteristics may be contrasted with those of common Fever in this country. In the succinct account of Fever given by that learned and lamented physician, he describes it to be of that inflammatory kind or tendency which justified his adoption of the opinions of Dr. Armstrong, with respect to its inflammatory nature; and afterwards he states, with regard to petechiæ, that they were not to be seen in more than nine cases out of 678 received into the Fever Hospital under his care.* If these circumstances be duly considered, they will, I think,

The importance of those considerations, to which our epidemic constitution gives rise.

Difference of opinion existing between English and Irish Physicians probably accounted for.

* See a Succinct Account, &c. by Thomas Bateman, M. D. &c. Rarius sed aliquando tamen, morbus quoque ipse novus est, sic ut nobilissimi medici, neque genus mali, neque remedium inveniunt. Celsus.

show how the differences of opinion among Physicians here and in London first arose, respecting the nature of Fever; and still further by contrasting such statements with them as my experience enables me to supply respecting our Common Fever.

Epidemic Fever not essentially inflammatory.

Common epidemic Fever, especially when contagious, as I have frequently asserted in speaking of its pathology and treatment, has not appeared to me at any time to be essentially inflammatory. Secondly, as shown (at Note 1, in Appendix) in a Table, contained in a letter to the Secretary of the Board of Health, made from a period when our indigenous Fever prevailed in a most decided form; that of 540 patients received under my care in Cork-street Hospital, from the 2d of April to the 3d of June—viz. 320 males, and 220 females; 206 males, and 180 females had petechiæ. It should be remarked, however, respecting the two months included in that Table, that then the pestilential epidemic, which commenced in 1823, was at its *acme*, and famine had not pressed the vast numbers into the Hospitals who afterwards, in that year fled thither to escape from hunger and want.

The peculiarities of the indigenous Typhus Fever of this city, when compared with the forms under which epidemics have been described formerly in this country, or even more recently in Great Britain, would, however, in

no circumstances appear more remarkable, than with respect to the temperature of the bodies of patients labouring under common Fever. For, I have found, that in a large proportion of the cases of unmixed Typhus Fever, that I have met with, the temperature of the surface of the body, was generally rather under than over the natural standard. This circumstance of diminished temperature was adverted to by Dr. Bateman to demonstrate the remarkable difference in the character of the epidemic he described, when compared with the Fevers treated by Dr. Currie; and I regret, that from various causes, I cannot show by reports kept in former years, the thermometrical admeasurement of the temperature of the skin, in the most exquisite form of Typhus Fever, as I am of opinion it would not only prove the great difference in their nature from those treated by Dr. Currie, or even by Dr. Bateman himself, but also why cold affusion has not been at any time found so beneficial in our Hospital, as it was stated to be in Dr. Currie's Reports of that Remedy. Under the head of cold or tepid affusion, as ranged amongst the remedies for Fever in the succeeding pages, a Table may be seen of the temperature, in 34 cases of Fever.

From later publications, however, on the epidemic Fevers of London, it would appear, that the differences between its characteristics there, and those we have been describing here for so

many years, are not now so great as when Dr. Bateman wrote his succinct account ; for, not only greater similarity than formerly appears between the symptoms and treatment, but also a greater proximity in our views of the pathology of Fever, as described in recent publications, compared with the descriptions of the “ epidemic by the Irish writers.” The same essential denominations also, founded on the same pathological views, are employed, though apparently unawares, if that is to be inferred from the total silence kept respecting any precedent for their adoption. But, however accidental this want of recognition might have been on the other side of the channel, it is surely lawful to claim our “ *dissecta membra* ;” with respect to Adynamic Fever more particularly, a denomination for Typhus Fever, which I shall employ, as I have hitherto done to express not only “ the putrid or malignant Fever of Sydenham ; the slow nervous Fever of Huxham ; the nervous Fever, of common language ; the synochus, typhus mitior and gravior, of Callen ; the jail and hospital Fever ; the *fièvres essentielles* of the French ; the epidemic of the Irish writers ; the contagious of Bateman ; the typhus of Dr. Armstrong ; and the proper idiopathic, or essential Fever of Doctor Clutterbuck.”* Whether it exists separately and independently ; or is combined with

* See a Practical Treatise on the Typhus or Adynamic Fever. By John Burne, M. D. &c.—London, 1828.

any of the other forms of febrile disease, sporadic or symptomatic.

The rise and growth of our indigenous Fever in 1804, in connection with its causes, may be traced from the sketch given, in the eighth page and appears from it to have continued down to the close of 1827; some preparation is therefore made to consider the much more favourable condition of disease, during the year 1828, which I have already had the pleasure to announce, and afterwards to show by the documents adduced for that purpose. And it must be further satisfactory to learn, that this favourable change in disease has been accompanied by a proportionate one in those moral and physical evils, which, from being commensurate and contemporaneous with its advance, seemed to indicate a relation, as between cause and effect.

Preparation
for showing the
decline of com-
mon Fever in
1828.

But the condition of disease in this city, during the past year, appears to me, besides the previous considerations, to possess such an abundant store of information for the medical inquirer, that I am further induced to invite particular attention to it. I am well aware, indeed, that others might do greater justice than myself to an investigation so difficult in its process, and so important in its result; nor should I now make the attempt, if it were not that the opportunities of inquiry afforded to me are peculiar; and that I should hold myself highly reprehensible,

Other reasons
for calling more
particular no-
tice to the con-
dition of disease
at present.

if, while such rapid advance towards perfection is made by other arts, I should allow any circumstance to prevent me from giving my assistance, however humble, to the promotion of one, so intimately connected as that of medicine, with the well-being of my fellow-creatures.

The Typhus
Fever less, but
other Epidemic
Diseases more
frequent, than
before.

Although there was considerable diminution of typhus Fever, under its own proper characters, yet there was a greater variety of epidemic disease in the first three quarters of the past year, than in the corresponding quarters of those preceding it. The diminution of the number affected with our common Fever arose apparently from a modification in the moral and physical causes of the peculiarities, rather than from any actual change in the epidemic constitution itself. “Quotcunque sint autem species illæ peculiæ, (said Sydenham) quæ in unâ eâdem constitutione invadunt, in communi unâ atque generalis causâ singularum productrice, omnes conveniunt, hæc scilicet aut aliâ æris Diatesi peculiari; et ex consequenti, quantocunque ab invicem; quoad typum et formam specificam, intervallo distent. Constitutio tamen omnibus communis subjectam singularum materiam ad ejusmodi conditionem, atque statum effingit formatque, ut præcipua symptomata, omnibus paria sunt.”

The probable
causes of these
phenomena.

As soon as the misery and inaction of the working classes were removed, or at least considerably relieved; in fact, as soon as a happy collection of circumstances gave a new call and

new hope to Irish labour, then common Fever, which had crowded the Hospitals before that time, began to diminish, as it has since continued to do. On the other hand, the prevalence of north-east winds, so productive of sickness among the sickly, prevailed in the spring months, and rendered several of our sporadic diseases epidemical. Hence, a very unusual number of cases of ague, measles, small-pox, after vaccination, and dropsy, was to be met throughout every grade of society.

The following Table exhibits the admissions, dismissions, deaths, and average mortality, in the Cork-street Hospital, in each month of the past year; also the aggregate number of days in Hospital, and the average number of days each patient remained in Hospital:—

The leading events at the Hospital in the past year.

YEARS	Admitted.	Discharged cured.	Died,	Average Mortality.	Aggregate Number of Days.	The Average Number of Days for each Patient.
1828, January	400	414	10	1 in 42 $\frac{4}{10}$	5985	14 $\frac{385}{400}$
February	320	300	26	1 in 12 $\frac{14}{26}$	5441	17 $\frac{1}{320}$
March	297	283	21	1 in 14 $\frac{10}{21}$	4935	16 $\frac{183}{297}$
April	257	279	16	1 in 18 $\frac{7}{16}$	5439	21 $\frac{42}{257}$
May	256	252	11	1 in 23 $\frac{10}{11}$	4025	15 $\frac{185}{256}$
June	237	222	6	1 in 38	3911	16 $\frac{119}{237}$
July	208	225	10	1 in 23 $\frac{5}{10}$	3344	16 $\frac{16}{208}$
August	194	191	20	1 in 10 $\frac{11}{20}$	2713	13 $\frac{91}{194}$
Septemb	178	173	16	1 in 11 $\frac{13}{16}$	2626	14 $\frac{134}{178}$
October	188	133	19	1 in 18	3376	17 $\frac{180}{188}$
Novemb.	196	178	20	1 in 9 $\frac{18}{20}$	3532	18 $\frac{164}{196}$
Decemb.	201	186	18	1 in 11 $\frac{6}{18}$	3455	17 $\frac{38}{201}$

By Comparing this Table with similar ones for the three preceding years, which may be

seen in the note underneath ; * the diminution of the common continued Fever which has been

* YEARS	Admitted	Discharged	Died	Average Mortality	Aggregate Number of Days	The average Number of Days for each Patient
1825, January	447	453	45	1 in $11\frac{3}{4}$	6740	$15\frac{3}{4}$
February	363	301	46	1 in $7\frac{2}{4}$	7060	$16\frac{2}{3}$
March	369	324	51	1 in $7\frac{1}{5}$	6529	$14\frac{3}{6}$
April	358	362	29	1 in $13\frac{1}{2}$	5536	$15\frac{1}{3}$
May	359	353	23	1 in $15\frac{1}{2}$	5509	$15\frac{1}{3}$
June	336	309	27	1 in $12\frac{1}{2}$	5056	$15\frac{1}{3}$
July	314	306	26	1 in $12\frac{2}{6}$	4800	$15\frac{9}{14}$
August	351	304	20	1 in $16\frac{4}{2}$	5365	$14\frac{2}{3}$
Septemb.	342	291	40	1 in $8\frac{1}{4}$	5511	$16\frac{4}{3}$
October	360	270	44	1 in $7\frac{6}{4}$	7318	$20\frac{1}{3}$
Novemb.	332	335	35	1 in $10\frac{2}{3}$	5815	$17\frac{1}{3}$
Decemb.	422	342	40	1 in $9\frac{2}{4}$	6053	$14\frac{1}{4}$
1826, January	526	520	39	1 in $14\frac{1}{3}$	7172	$13\frac{3}{5}$
February	383	299	28	1 in $11\frac{1}{2}$	5972	$15\frac{2}{3}$
March	484	459	34	1 in $14\frac{1}{4}$	7609	$15\frac{4}{4}$
April	612	558	30	1 in $19\frac{1}{3}$	7323	$11\frac{1}{6}$
May	802	784	26	1 in $31\frac{4}{2}$	8404	$10\frac{3}{8}$
June	741	723	21	1 in $35\frac{9}{2}$	7855	$10\frac{4}{4}$
July	808	768	16	1 in 49	8720	$10\frac{6}{8}$
August	1324	1121	32	1 in $36\frac{1}{3}$	12413	$9\frac{4}{13}$
Septemb.	1495	1461	39	1 in $38\frac{1}{3}$	13732	$9\frac{2}{14}$
October	1211	1173	33	1 in $36\frac{1}{3}$	13547	$11\frac{2}{11}$
Novemb.	1102	1085	41	1 in $27\frac{1}{4}$	13729	$12\frac{5}{11}$
Decemb.	1124	1051	41	1 in $26\frac{2}{4}$	13938	$12\frac{2}{5}$
1827, January	1069	1082	55	1 in $20\frac{3}{5}$	12530	$11\frac{7}{10}$
February	814	784	53	1 in $15\frac{4}{5}$	10818	$13\frac{2}{8}$
March	784	803	47	1 in $18\frac{4}{4}$	9964	$12\frac{5}{7}$
April	499	568	21	1 in $28\frac{1}{2}$	6025	$12\frac{4}{4}$
May	492	463	26	1 in $18\frac{2}{2}$	7274	$14\frac{3}{4}$
June	469	450	26	1 in $18\frac{2}{2}$	6183	$13\frac{7}{4}$
July	413	417	23	1 in $19\frac{3}{2}$	5823	$14\frac{4}{1}$
August	396	357	14	1 in $26\frac{1}{2}$	6308	$15\frac{1}{19}$
Septemb.	424	406	26	1 in $17\frac{1}{2}$	6020	$13\frac{4}{4}$
October	386	375	20	1 in $19\frac{1}{2}$	5870	$15\frac{8}{3}$
Novemb.	395	370	20	1 in $19\frac{1}{2}$	6842	$17\frac{1}{3}$
Decemb.	359	319	26	1 in $13\frac{7}{2}$	5313	$14\frac{2}{3}$

announced, will be more apparent ; and in another Table, in which I intend to exhibit the proportion of the cases placed under my care at the Hospital, those affected with other species of epidemical diseases, besides that of common Fever, will be stated, in order to prepare for those more minute objects of inquiry, which will chiefly occupy the succeeding pages—what these objects are, I may now state.

The cases in my Hospital, and private practice, seemed to me to afford very forcible illustration of those opinions on the pathology and treatment of disease, which I had already ventured to lay before the public ; and I was desirous to describe those events, while still fresh in my memory, in order to compare the opinions so illustrated, both in their principle and effect, with those entertained by others, whether of previous or more modern invention.

The cases illustrative of the Author's pathology.

Besides, as it is the universally acknowledged duty of a physician to learn the disorder of his patient before he attempts to prescribe ; so, for simplicity's sake, I shall now endeavour to determine the leading character of our epidemics, before giving my reason for rejecting some remedies and adopting others for their treatment. “ Sentio autem (said Sydenham) nostræ artis incrementum in his consistere, ut habeatur *Historia sive morbarum omnium descriptio, quoad fieri potest, graphica et naturalis, Praxis seu methodus circa eosdem stabilis ac consum-*

The duty of the Physician to learn the character of disorders before he prescribes.

*mata.** It is the more necessary, perhaps, to be guided by this precept just now, since the very different modes of cure which have been adopted by persons of merited reputation, justify the supposition, that there exists among my medical brethren a marked difference of opinion respecting either the nature of the disorder, or the practical application of medical theory.

A more particular description of our Epidemics given by cases.

The general characteristics of our epidemics, and the periods at which they assumed their peculiarities having been already remarked on, a more particular description of them, will be found, as I think it can thus be best given, in those cases from my Hospital, and private practice, by which I intend to illustrate the several epidemic diseases; and in the mean time, shall proceed to a question, which appears to me of the first practical importance, which is, whether the epidemics of Dublin are most strongly marked by typhoid, or inflammatory characters.

Are the Epidemics of Dublin typhoid or inflammatory?

They are typhoid, in their symptoms.

In my opinion they are, and during the last twenty years particularly, have been rather of a typhoid or adynamic nature. The symptoms of our Fever, however it originates, generally distinguish it from that which is produced either by wound or local inflammation. The great accompanying debility at all stages, the intervals of apyrexia between the successive

* Sydenham opera medica.

cycles and paroxysms, (when the diminution of vital power, as already intimated, has not interfered with the distinctness of those cycles or paroxysms)—and the tendency, if not interrupted in the same manner, to terminate by recovery or death on certain critical days, are characters which, in their distinctness and degree, belong peculiarly to disorders partaking, as our epidemics do, either of a typhoid or intermittent nature. In inflammatory Fever, on the other hand, instead of such general and marked debility, there is always pain and increased vascular action, in proportion to the febrile excitation, which cause and effect generally proceed together without intermission, until the disease terminates either in the complete recovery or destruction of the part engaged. Now, it is not asserted here, that there are not certain qualities common to both forms, nor, that there will not be found in both a certain degree of debility, and a certain degree of pain; what I do assert and maintain is this, that the circumstances and degrees under which these symptoms appear in the two forms, are so very different and unequal, as to draw a distinct line of demarkation between them. Therefore, the one I call typhoid, or adynamic, and the other inflammatory.

But when, as not unfrequently happens, there is a precise and positive combination of the two forms, it is of the highest importance to hold their respective qualities distinctly in view.

Symptoms distinguishing inflammatory Fever from typhoid

Where these opposite symptoms are complicated.

The manner in which they should be treated.

They should then be treated according to their relative urgency—the practitioner always remembering, that the typhoid debility and inflammatory action, are contraries working strongly against each other, and that debility in general is the ultimate result.*

These distinctions to be observed also in agues and exanthemata.

The great value of these diagnostics is not confined to the common continued Fever only, as they will apply with equal force to agues, and the exanthemata. For, though during the febrile excitation of a paroxysm of the former, or

* Many instances, when the distinction between inflammatory and typhoid diseases, and their relative degrees, appeared to me to be of vital importance, occurs to my recollection; but I shall venture to make room for the following only, on the present occasion. In July, 1817, I was called, in consultation with the late Surgeon Scott, to visit the four youngest children of a respectable shoe-merchant, in Aungier-street, and found them with well-marked symptoms of Cyananche Trachealis, in a very urgent degree. It was soon apparent, however, that neither general or local bleeding was followed by the expected relief; but, on the contrary, the approach of extreme debility appeared to be hastened by it. The blood, too, that was drawn, instead of being buffed, as in inflammatory diseases, was broken down, and dark-coloured.

The youngest but one, a delicate child, aged three years and a half, died; and, on examination, the adventitious membrane was found lining the trachea to a considerable extent, but it was dissolved and ruptured at several points, brittle and soft every where. On examining the interior part of the pharynx, several ill-conditioned phagadenic ulcers were discovered on it, and they extended into the œsophagus, as well as deeply into the substance of it.

The whole plan of treatment with the rest of the children was then changed, and wine, light broth, and fruit, together with cordial and tonic medicines were directed. An amendment followed, and complete recovery took place.

May not the spreading of the croup in this family have been the consequence of the complication with it of the malignant sore throat?

the eruptive stage of the latter, it may be more difficult, it is not less necessary in my opinion, than in the cycles of common Fever to distinguish the symptoms of mere inflammation from those of constitutional reaction, which may be only a vigorous, though at that time, perhaps, ineffectual effort to oppose or expel some noxious agent, “*Nihil esse aliud quam naturæ conamen; materiæ morbificæ exterminatione in ægri salutem omni ope molientis.*”^{*} This distinction, I apprehend, every experienced physician will readily acknowledge.

The effects of bleeding further evince, that our epidemic Fevers are not of the inflammatory kind. In the early stages of mild and mixed cases, while the natural tendency to recovery is still strong, the injury or uselessness of bleeding, may not perhaps be so apparent; yet, if the pulse be frequently examined during the operation, as it ought in every instance, it will be found, that debility proportioned to the urgency of the case, speedily succeeds. After the abstraction of two or three ounces of blood, the pulse will sometimes sink—sometimes become unequal and rebounding—an effect in any case very different from what it would be in mere inflammation. But the result of an extensive inquiry in our Hospital, into the comparative merits of bleeding, and

The effects of bleeding on the pulse in typhoid Fever.

* See Thomæ Sydenham opera medica, caput primum.

other remedies in fever, should in my opinion have long since settled this dispute.*

The appearances which the blood presents are indicative of the treatment in Fever.

It has often occurred to me, that not only the effects which blood-letting evidently had upon the strength and condition of the patient, but also the appearances of the blood drawn were in a great measure indicative of the necessary treatment. And long since, when my attention was directed to these appearances with a different design, they seemed to me, both in the stages and sequels of the varieties of

* As I have on former occasions entered fully into the principle of this question, I have deemed that it would be superfluous at present to do more than give in a cursory manner abstracts of those arguments formerly used. Lest, however, any reader should be giving his attention to me now, for the first time, or any other be forgetful of the inquiry which is referred to in the text, I shall here insert for the convenience of such, a brief account of it.

It happened that there existed among the physicians of the Hospital, a difference of opinion respecting the merits of blood-letting in the treatment of the common or mixed forms of Fever. One of the Physicians, then connected with the Institution, used blood-letting with all, or nearly all his patients, the others rarely or never employed that remedy. As the number of patients is equally divided among the attending physicians, and as that division appears under similar circumstances, of course a comparison of the average mortality which attended these different forms of treatment, will speak decisively upon this question. By the one mode of treatment, where bleeding was employed the proportion of deaths to recoveries, was as one to eleven $\frac{4}{5} \frac{9}{9}$; in the other mode of treatment, where blood-letting was not employed, one to twelve $\frac{1}{1} \frac{0}{1} \frac{1}{0}$. It should be farther observed, that the contrast in the average mortalities, would have been more striking and remarkable, if the mixed cases could be separated in the calculation. Those who are anxious to have the account of the trial more in detail, may see it in the Tables from the Hospital diary, in my Essay on Fever, London, 1815; and also in a Dissertation by me on the Institutes of Medicine, Dublin, 1826. Pages 191 and 199.

our epidemics, to indicate, with considerable accuracy the relative urgency and degree in which the inflammatory or typhoid characters prevail in each case. In the highest degree of febrile excitation, at the commencement of these Fevers, unless where they are combined with inflammation, the blood drawn is seldom buffed. Where this combination of inflammatory and typhoid Fever exists, the buffy coat does, indeed, in most cases appear, especially in those of sthenic labits, and in the vernal season, but never so dense and colourless as in pure inflammation. Moreover, the buffy coat appears almost exclusively upon the first cup.

But, in successive bleedings in epidemic and in inflammatory Fever, the difference in the surfaces of the blood becomes much more decided and remarkable.* The buffy coat, in the former case, more suddenly disappears, and the adhesiveness characteristic of inflammation becomes so much relaxed, that the crassamentum either dissolves, or falls in fragments to the bottom, tinging the serum with its colour,

The differences of the surfaces in typhoid and in inflammatory Diseases become more manifest in successive bleedings.

* I am much gratified in being able to present the reader with the following observations on this subject by my much esteemed friend, Dr. Percival; they were noted by that justly distinguished physician, among other valuable additions to it, on the margin of the 69th page of my Dissertation on the Institutes of Medicine:

“In the jail fever, (he states) which infected the soldiers, who guarded French prisoners in the castle of Edinburgh, in the year 1778, the blood drawn, presented the appearance of an uniform tremulous mass, soft in its texture, and of a much lighter colour than that of healthy blood—venesection was soon laid aside.”

which is sometimes of a dark brown, at others of a greenish hue. I would beg leave, on the present occasion, further to observe, that the greater fluidity of the blood in adynamic or typhoid Fevers, appears to me to depend upon the breaking down of the crassamentum, rather than to any disproportionate increase of the serous parts : and that this, and such like remarks, is confined for the reasons already given in my “Pathology of Fever,” to the physical characters of blood.

Other appearances presented by the blood in different stages of Fever.

Besides these appearances, there are others which the blood presents in different stages of epidemic Fevers, before and after the crises that appear to me to deserve close attention, as they will assist to distinguish the different changes which occur in the disease.

Differences before and after crises.

During the excitation which at all stages precede crises in Fevers, either of the continuous or intermittent kind, the almost total absence of sizzly surface, indicates how little inflammation existed at the same time. On the other hand, when blood is drawn after the crises, or in the sequel of such Fevers, its sizzly appearance is generally proportioned to the degree of febrile excitation, and indicates derangement, either in the chyliferous or sanguiferous system, sometimes in both.

The indications which I have alluded to now, are chiefly those (as stated at the 36th, and suc-

ceeding pages of the Pathological Proem originally intended to be prefixed to my account of epidemic diseases) which arise from the distinctness of colour, and of the external characters which designate the various kinds of buffy colour on the blood, having found such distinctions of external character point with considerable certainty to the function particularly engaged, and more especially as respects the hepatic and pulmonary systems. Thus, in cases of simple pneumonia, or where the lungs only were engaged, I have generally found, that the coat exhibited on the blood drawn, was of a clear white appearance, and that when in such cases the buff was tinged, it was with a bright red colour, and did not exceed a few lines in thickness. The cupping of the surface, as it is called, is also most remarkable on such blood, a circumstance which arises probably from the great thinness of the film, drawing together the external margin of the less contractile crassamentum. In simple forms of hepatic disease, on the other hand, the buffy covering on the blood drawn, is generally of a more dusky white through its whole substance, than in pneumonia, and has a yellower hue. The buffy coat also occupies a larger portion of the solid parts of the blood, than it does in pulmonary complaints. When, however, as not unfrequently happens, the pulmonic and hepatic systems become equally engaged in the disease, these distinctions cease ; but, I have often seen them restored in the same proportion with

Indicature of
the part chiefly
affected.

In Pneumonic.

In hepatic diseases.

When there
is a combination of hepatic and pulmonic diseases.

In Diabetes. the diseased actions themselves. When blood is drawn in diabetic complaints, it is often found covered over with a whitish creamy fluid, the crassamentum itself being of a brighter colour than that of venous blood, and in my opinion further indicates the digestive organs to be the original seat of that disease.*

Physiological
hypothesis re-
ferred to.

Without at all intending to connect those pathological observations with the physiological hypothesis, by which I have attempted to explain them, I beg leave to refer to it, as stated from the 19th to the 30th pages of the Pathological Proem, from which much of the preceding diagnosis is taken, an hypothesis, to which I shall again invite some attention, when I come to treat of the *ratio symptomatum*.

Appearances
of blood drawn
in the exanthe-
mata different
before the erup-
tion, and after
a crisis.

In the exanthemata, in like manner, a comparison of the blood drawn before, and after the appearance of the eruption, seems to me to be no less instructive. In general, when the symptoms do not manifest the presence of inflammation, the surface of blood drawn, resembles exactly the colour and texture of the crassamentum. The colour (which is most remarkable from its

* I am again, through the kindness of my friend, Dr. Percival, enabled to avail myself of his experience, in the following note, which he wrote on the margin of the 27th page of my Introduction Dissertation to the Pathology of Fever. "This (something like cream floating on blood) I have observed (he says) in a diabetic patient, when blood threw up, by jets, a creamy substance, which in a few minutes covered the whole surface."

vividness in scarletina) resembles in most cases that of the forthcoming eruption. But blood drawn in the sequel of exanthematic Fever, is generally (and at times, I believe, independently of inflammation) sizy in proportion to derangement in the chyliferous or sanguiferous systems. Of this derangement, the febrile excitement, or increased vascular action, is symptomatic.

These remarks on the diagnostics, afforded by the physical characters of the blood in the various forms and stages of our epidemic disease, might be extended much further. To notice them all, however, would be foreign to my present design. I have been led thus far, to assist in deciding on the true nature and tendency of our epidemics. I shall only add, that in those serous and sanguineous extravasations tending to dropsy, apoplexy, or palsy, which are so frequently found to succeed metastases in the course of bad Fevers, the blood exhibits a totally different appearance, when drawn before from what it does after convalescence. In the one case, the surface of the blood differs in no respect from the loose-textured and deep-coloured crassamentum characteristic of typhus Fever; in the other it is almost always sizy, in proportion to the degree of vascular action, which preceded venesection, and often clearly indicates derangement or obstruction in the digestive or sanguiferous system,* while the particular colour and texture of

These diagnostics, by the physical character of the blood, apply also to dropsical effusions before and after crises.

* See Pathological Observations, page 4.

the size, as often suggests what that system is, which is relatively engaged.

Practical conclusion from the foregoing statement of facts.

I think that every practical physician will admit, that the primary symptoms—the effects of bleeding—the appearance of the blood drawn in different stages of the disease—and the indifferent success that blood-letting met with when its relative merits were tried—all favour the opinion that our epidemics are in their nature typhoid. It now only remains to inquire whether *post obit* examination denies or corroborates the reality of those appearances. Now, morbid anatomy declares, that the phenomena presented by inflammatory and typhoid diseases are quite different; and that either the duration or effect of general Fever and visceral inflammation are not necessarily the same; thus corroborating, as far as its evidence can go, the truth of my original opinion.*

With this conviction, my practice has been

* See Mr. Kirby's reply, to my Queries, Fever Hospital Reports for 1817—1820-21, and Pathological Observations, page 41. Also, Dr. Macartney's replies to queries that were put to him by Dr. Barker. Fever Hospital Report for 1818. For the reasons assigned, when I first published the evidence of those distinguished anatomists, as to the distinctness of the morbid appearances, found on the bodies of those who die of typhoid and of inflammatory Fever, I have chiefly relied on them in such discussions as the present; but I now beg leave to add, that all the *post mortem* examination I have made, both before and since these statements, entirely accord with them; and I further beg to refer to those dissections set forth in the subsequent part of this report, as a corroboration of them.

identified ; and the general result is exhibited in the following Table. This Table is taken from the Hospital diary, and shows the number of patients who passed through the wards under my care in the past year—also what was the number in particular diseases, in the months of my attendance, January, April, May, August, September, and December.

The following Table exhibits the result of the author's Hospital practice in the past year.

TABLE FOR 1828.

Month.	No. admitted.			No. in Petechid Fever and Dysentery.			No. in Dropsy.			No. in Small Pox.		
	Males	Fem.	Total	Died	M.F.	Total	Males	Fem.	Total	Died	M.F.	Total
January,	109	95	264	1	4	37	31	68	1	1	—	—
April & May,	149	93	242	2	1	24	3	27	0	0	—	—
Aug. & Sept.		160		10		—	64	—	8	—	—	2
Decem.	49	57	106	3	4	12	14	26	3	4	—	—
Total	307	305	612	6	19							

How the average mortality is to be taken from the numerical statement in the preceding Table.

This Table accurately states the whole number of sick persons, and the number who died in my wards during these months of my attendance. But that the result of my treatment may be more clearly seen, by the proportions which the deaths bear to the recoveries, it is first necessary to subtract from these numbers stated, such as I left in Fever when my extern duty commenced, and also those whom I found convalescent at the commencement of each period of my intern duty. Thus, the aggregate number of patients under my care in the first three months, January, April, and May, (to which, for a more convenient division of the subject, we shall in the first instance confine our observations,) appears to be 408. From this there should be subtracted 97, the aggregate number of those I found convalescent at the commencement, and left sick at the termination of my intern attendance. Of the 311 remaining after this subtraction, 8 died; but of these eight there were two who did not live sufficiently long after their admission to receive any treatment. Thus, the average mortality among those treated by me appears to be, in these three months, 1 death to $51\frac{5}{6}$ recoveries. And if the number of those who died of phthisis, chronic dysentery, and dropsy, be left out of the question, (as probably in calculating the mortality from simple continued Fever they ought) the Hospital diary would present a very limited mortality indeed, in my wards.

The adynamic or typhoid Fever, which had prevailed with such severity for the preceding seven years, appeared in the Hospital under its worst characteristics in the beginning of the last year, though confined to fewer cases than in the corresponding period of the preceding year; and as this diminution became more remarkable, epidemic diseases discovered more and more of those aguish characteristics which they had preceding the extraordinary growth of typhoid Fever, which we have already traced. It will be more convenient, therefore, first to consider the varieties of continued Fever, which had been produced by that peculiar state or condition of body into which a large proportion of the working classes of Dublin were brought, by having been long subjected to the operation of the same physical and moral causes; and afterwards proceed to a description of the other forms of epidemics, as they rose successively in the succeeding seasons of the year.

Typhoid Fever prevailed in the commencement of the past year.

To illustrate the several forms of our epidemic Fevers, by cases from my Hospital and private journals, as I proposed, I shall, as on former occasions, arrange them under the first general division of Fevers, into *idiopathic* and *symptomatic*, on account of its convenience; and because Dr. Cullen's subdivision into synocha, synochus, and typhus, is most generally known, I shall also adhere as nearly as I can to it, premising, however, that, according to my views of the pathology of Fever, typhoid or adynamic,

The division of common epidemic Fever, adopted on this occasion.

But, according to the Author's views, typhoid Fevers are also symptomatic. would be arranged as well as inflammatory Fevers, under the head of symptomatic, because they indicate changes in the fluids, as constantly, I believe, as the others do changes that may be traced in the solids. However, for convenience sake, I refer to this nosological division; but, for the reasons assigned at the 18th and succeeding pages of my Report for the year 1823, I shall on the present occasion also, arrange the cases of inflammatory Fever under the head of symptomatic Fever, and those of continued or simple Fever under the heads of synochus, typhus mitior, or mixed Fever, and lastly, of typhus gravior; and thus follow nearly the same arrangement as in my first Essay on Fever, published in 1814. Some practical observations on the nature and treatment, will succeed the recital of the cases.

CONTINUED INFLAMMATORY FEVER.

Cases of Symptomatic Fever, from my Hospital Journal.

GASTRITIS.

CASES
of inflammatory
or symptomatic
Fever. Gastritis.

John Halpin, aged 21, admitted April the 9th, a jaunting-car driver, in the habit of drinking spirits when exposed to cold; was attacked on the 1st. inst. with severe pain of stomach, increased by ingesta, attended with frequent vomiting. There is considerable increase of pain on pressure over the epigastrium; great anxiety and sleeplessness; slight hiccup; face darkly flushed; pulse 130, and small; belly costive; urine scanty, and high-coloured; tongue furred and dry; thirst urgent, but cannot drink freely, without exciting vomiting;

was once bled since the commencement of his illness, and felt relief from it. Prescribed venesection to 12 ounces, to be repeated in the evening, if necessary; emollient enemata every third hour, till the bowels are freed; the abdomen to be fomented with flannels, wrung out of hot water; barley water for drink as soon as the stomach will bear it.

April 10th. Was twice bled yesterday, and was much relieved each time—the blood is deeply and darkly buffed, but not cupped; the enemata have produced a copious discharge of light-coloured scybalous feces; and he has since retained his drinks, which he takes freely; tongue softer; face less flushed; pulse 100, and fuller; urine passed freely, very turbid and reddish coloured; *urina flammiea* and scanty. On examination, a large pile appears at the extremity of the rectum. Prescribed 12 leeches, as nearly as possible to the extremity of the rectum; five grains of blue-pill every sixth hour, assisted by emollient enemata; the abdomen to be rubbed over with a liniment of equal parts of ammoniated and turpentine oil; and the stupes, drinks, and low diet to be continued as yesterday.

On the 12th this patient was convalescent; and on the 15th was dismissed free from complaint.

HEPATITIS.

Michael Killen, aged 21, a weaver, of spare habit and melancholic temperament, was admitted April 7th, 1828. Illness commenced on the 30th of March, with severe pain at the epigastrium, impeding a full inspiration, and extending towards the right hypocondrium, to which sickness of the stomach, and febrile symptoms succeeded. The pain at the epigastrium was for some time preceded by loss of appetite and

Hepatitis.

of sleep, by fretfulness, and by costiveness of the bowels. All these symptoms have been much aggravated within the last two days on exposure to damp and cold, and after an exertion made without inclination or ability.

On my first visit to him at the Hospital, I found the skin hot and jaundiced, but moist; the face had a partial circumscribed flush; some head-ache; tongue of a dusky white, and loaded; frequent nausea, especially on the mention of food; thirst urgent; constant dull pain and soreness over both epigastrium and right hypocondrium increased on pressure, or attempting to lie on the left side; abdomen tumid, and slightly tympanitic; some anasarka at the ankles, but chiefly at the right leg; sleep disturbed, and not refreshing, often interrupted too by palpitation of the heart; pulse 90, very unequal in strength, and intermitting, but the intermission not connected with any definite number of pulsations; belly costive; urine scanty and turbid. Prescribed bleeding from the arm to 12 ounces 3 grains of *pilulæ hydrargyri*, three times a day; purging mixture every fourth hour, assisted by enemata, till the bowels be freed; fomentation of the epigastrium and feet twice a day.

On the 8th, the blood drawn the day before was densely and deeply buffed; both buffy coat and crassamentum dark-coloured.* Felt himself considerably relieved by the bleeding and freedom of his bowels; the pulse became more regular; the alvine discharges still clay-coloured, and the urine scanty, but turbid. Prescribed the remedies as yesterday to be repeated, together with twelve leeches to the anus, and a stimulating liniment to be applied twice a day by friction to the side affected. This treatment

* See Pathological Observations—Part 1st. pages 736-7-8.

was continued, and soon restored the healthy functions of the parts engaged, and convalescence succeeded, with a plentiful secretion of bile and urine. On the 11th of April, his food was changed from low to middle diet; and on the 13th he was dismissed free from complaint.

PNEUMONIA.

Michael Barry, a servant, aged 18, sanguine temperament, and full habit, was admitted April 11th, 1828; had been attacked on the 7th inst. with pain under the left mamma, extending anteriorly to the right of the sternum, and posteriorly to the spine; pain very acute on attempting a full inspiration, and increased by a frequent hard cough. All those symptoms were much relieved, he stated, on the second day after the attack, by a moderate bleeding from the arm; but they have since returned, accompanied by a higher degree of pulse; complains of headache and loss of rest; of cough frequent, hard and dry; pulse 130, and hard; belly costive; urine pale, but passed copiously. Prescribed bleeding from the arm to 12oz.; the blood coagulated quickly, and was buffed, and cupped with a white surface; the bleeding was repeated in the next 24 hours with increasing relief; blisters were applied to the pained part, which remedies, assisted by saline aperients, and the antiphlogistic diet of the Hospital, were succeeded by convalescence on the 17th of the month. In the sequel, however, the cough was renewed, and night-sweats, with purulent expectoration, and hectic Fever, for some days threatened an attack of phthisis pulmonalis. Under the following treatment, however, recovery again advanced until the 5th of May, when this patient was dismissed free from complaint.

Pneumonia.

Treatment of
spurious phthi-
ses.

By emetics.

Generous diet.

The descrip-
tion of vegeta-
ble bitters that
should be pre-
ferred.

My treatment in such sequelæ of pneumonia as the foregoing, which, I think, may be fitly denominated spurious phthisis, consists generally in the prescription every third day of an emetic, composed of ipecacuanha, and sulphate of zinc, of mild aperients, so as to insure due freedom of the bowels; and the allowance of milk diet. In cases of debility, making that diet more generous by the addition in the forenoon of light animal food, and sometimes of a little wine, largely diluted. In such cases of spurious phthisis, I have often found the best effects succeed generous diet, even the pulse itself moderated by it—oftener, indeed, than by other means. When, however, this favourable change did not happen, I directed vegetable bitters, such as preparations of horehound, of some of the lichens, particularly the Iceland moss, dandelion, either separately or combined, with hippo or digitalis, if the rapidity of pulse indicates these remedies, or with mineral acids, when colliquitive sweats indicate them. I am induced to adopt and recommend these vegetable bitters, from finding more favorable results from them, than any I have seen reported by even the warmest advocates for others, whose poisonous qualities are neither so much under the control of vital power, nor of those antidotes, which experience might dictate. Having directed much of my attention to this question since the epidemic constitution of 1823, which has produced a greater number than usual of such cases of spurious phthisis, I am desirous

to put my testimony on record; and I might adduce numerous cases besides, both from my Hospital and private practice, in support of this testimony, but must confine myself to the specimen here given. In Note 2, in the Appendix, amongst other cases, in which the controlling power of digitalis over the morbid condition of the blood, and thus over the increased arterial action which that condition excites was remarkable, see that given with this view in particular. It was one of extensive aneurism of the aorta, where the extraordinary reduction of the aneurism and restoration of the patient to health was, I believe, under Providence, mainly attributable to digitalis. In two other cases of aneurism, which I published in the first volume of the Association of the King and Queen's College of Physicians, recovery was also attributable to this remedy.*

How digitalis controls the increased action of the arterial system.

Besides the vegetable bitters enumerated above, I have employed several others with advantage in the sequelæ of inflammatory Fevers, when hectic Fever threatened supervening phthisis, but more especially Peruvian bark, under the form of sulphate of quina. Of the utility of this remedy, indeed, I can speak positively, when administered during the apyrexia of the hectic Fever, that succeeds inflammatory diseases, or during the intermission in these

Besides other vegetable bitters, Peruvian bark is sometimes useful in the sequelæ of inflammatory Fevers.

* See First Volume of the Transactions of the King and Queen's College of Physicians in Ireland.

hectic sequelæ of Fever, which were so peculiarly remarkable last spring, when ague prevailed. See some cases of the exanthemata, succeeded by intermittent hectic, which will be found under the head of measles.

As the difference between the symptoms of visceral inflammation, or of those of their sequelæ, consists in certain modifications of the part engaged, the foregoing specimens must suffice; many such cases, however, may be found under the same denomination in my first Essay on Fever, published, 1814.

RATIO SYMPTOMATUM.

Ratio symptomatum.

The illustration of my pathological views, afforded by such cases, next demands attention, first, as respects the ratio symptomatum, and secondly, the ratio medendi. The striking resemblance between the colour of the surface of the tongue, and that of the blood when drawn, appears to me to indicate a connexion between these phenomena, which is highly instructive to trace—from the exanthemata, where it is most striking through all febrile diseases; and further, many other morbid changes in the surface of the tongue, otherwise unaccountable, might be explained by the connexion to be found between them and the altered state of the blood: thus, besides the white, the livid, the purple, the yellow, the brown, and other discolorations of this organ, there is a decided connexion be-

Condition and colour of the Tongue.

tween its dryness, its chopped appearance, its inaction, and its involuntary motions, and those morbid changes of the blood,* which take place

* As I intend to avail myself of the experiments of the Genevese and Parisian physiologists, to elucidate subsequent parts of my *ratio symptomatum*, it is particularly gratifying to me to be able in limine to borrow at home for the same purpose ; and an able Essay lately published in the Transactions of the Royal Irish Academy, appears to be well suited to illustrate the connection between the colour and condition of the blood, and those morbid appearances on the surface of the human body, which take place in the course of febrile diseases. The main object of that Essay, as well as the peculiar structure of the animal, which render the phenomena examined so observable, may be best known by consulting the work itself ; but the following passage is too applicable to the illustration of the changes of colour on the surface of the human tongue, and of that of the skin in general, which takes place in Fever, to be omitted on an occasion like the present.

“ The external surface of their skin (two Chameleons, the one twelve inches in length, the tail included, the other ten) was thickly set with soft tubercles, like the heads of small nails, some of a whitish, others of a bright yellow colour : the white tubercles were most numerous, and existed every where over the body ; the yellow ones were so arranged as to form along each side of the back two rows of lozenge-shaped spots, and round the legs and tail annular bands. When examined in the morning, or during sleep, the whole surface presented a greyish cast, with the exception of the yellow marks ; but when the animal was excited in any way, as by pricking, or transferring it from a cold to a warm temperature, an evident change of colour took place, sometimes all over the surface, sometimes only partially, according as the excitement affected the entire or only a part of its body. A brownish tinge gradually overspread it, engaging, equally the tubercles and the intermediate skin ; while the spots, which were previously yellow, acquired a slight admixture of green. The shades, however, were few, and confined to those intermediate between a light grey and a deep brown, with a little yellow or green interspersed through them, but never, that I could observe, bore any relation to the colour of the surface on which the animal happened to be placed. In dissecting the skin after death, its exceeding thinness and vascularity attracted my attention. In every part, but more especially between the tubercles, it was so thin as to be almost transparent : and its internal surface, when examined through a magnify-

Morbid actions, in the course of bad Fevers. Many of the morbid actions which take place in inflammatory Fevers, are also the consequence of the alterations in the blood so indicated; thus, increased arterial action, and consequent heat and redness in the part engaged, is, I think, fairly attributable to the preternatural stimulus given by the change in the physical properties of the blood. The organs engaged in the function of sanguification may themselves also be supposed to be deranged in proportion as the circulating mass carried to them has not undergone those preparatory changes which fit them to be acted upon by these functions—functions, too, from being carried on probably through the medium

Connected with changes in the physical characters of the blood.

ing glass, presented a complete net-work of fine vessels, rendered visible by the dark blood which they contained. A portion of skin removed from about the eyes, where in death it became dark, even to blackness, displayed most satisfactorily the great abundance of its vessels.

“These observations on the skin I have deemed it right to make as they appear to confirm the opinion entertained by some physiologists, that its changes in colour are produced by vascular turgescence, just as the increased redness in blushing is caused by a rush of blood to the cheeks. The colour of the blood appearing through the semi-transparent skin, and modified by the various permanent colours of that structure, is sufficient to account for every diversity of tint which the chameleon exhibits. I have been induced more particularly to offer these remarks in this place, because from the facts which I have noticed regarding its tongue I have been led to infer, that the peculiarities of that organ are all referable to the same general cause viz. vascular turgescence.”—See an Essay on the Structure and Mechanism of the Tongue of the Chameleon. By John Houston, Esq. Member of the Royal College of Surgeons in Ireland, Conservator to the Museum, and Demonstrator of Anatomy in the School of Surgery, &c.—*Dublin*, 1828.

of organic infinities, subtending to vital power, must be always liable to derangement, in proportion as these powers are either weakened or unequal in degree. I am still anxious, however, not to be understood to connect these physiological conjectures farther than is perfectly consonant with the facts under consideration of actual changes in the physical properties of blood, and with that view only, I refer to the pages of my Dissertation on the Institutes of Medicine, which have been already quoted. But in treating of the ratio symptomatum, in inflammatory Fevers, I think the very constant similarity of colour which I have found between the white tongue and the buffy coat in those pulmonary affections which are produced by the unprepared state of the fluids at the chief and primary avenue of supply, should not be passed without some further notice. In inflammations, too, affecting the abdominal viscera, a great similarity may be perceived between the dusky white colour of the buffy coat on the blood drawn, and that of the tongue, and which further corroborates the opinion of the connection between these phenomena. These corresponding changes of colour are attempted to be explained on the principle of functional derangement in the work already referred to. The approximation of colour of the buffy coat of blood drawn in inflammatory Fever, and that of the circulating fluids appearing through diaphanous tunics may also be advantageously employed in hæmorrhages and dropsies, to assist as diagnos-

The colours appearing through diaphanous membranes, may assist diagnostics in hæmorrhages and dropsies.

tics of the seat of disease, or to point out the relative cavity engaged. When such affections are seated in the encephalon, or other parts external to the thorax, the colour of the furred tongue, and of sily blood in general, resembles that produced by similar affections within the abdomen, and which, for the reasons stated in the publication already referred to, I believe to be connected with derangement of sanguification in the hepatic system. When I come to treat of typhoid and exanthematic Fevers, I shall avail myself of that opportunity to extend these views still further.

Less pain in inflammation of the parenchymatous viscera of abdomen, than of those of thorax.

The lesser degree of pain attendant on inflammation of the parenchymatous viscera of the abdomen, than on that of the viscera of the thorax, may perhaps be also explained by the different degrees of viscosity of the circulating mass in such cases. In the former cases, the dark venous blood not flowing so freely into the extreme vessels as that in the latter; for it is probable that it is in the forcible distension of those extreme vessels by more fluid blood, that the highest degree of pain is excited.

The irregularity and inequality of the pulse, often attendant on sily blood.

I shall add but one observation more on the ratio symptomatum; it respects the irregularity and inequality of the pulse which sometimes attend inflammations of the viscera, more especially where such symptoms are accompanied by tendencies to dropsical effusion. I have frequently found, that these irregular actions of

the heart and arteries attend on those affections of the functions of the abdominal viscera, which promote dense and sily blood; examples of which will be given under the head of dropsies; as it appears to me of great moment, that such facts should be established—cases of sily blood having been not unfrequently confounded with those of disorganization, and hence deemed incurable

RATIO MEDENDI IN INFLAMMATION.

According to the foregoing views, the morbid condition of the blood, however excited, is to be esteemed the chief agent in producing the symptoms of inflammation; blood-letting is accordingly indicated in proportion to those symptoms, in order to diminish the bulk; and hence the momentum of the circulating mass, and thus also by lessening the vis-a-tergo, diminishing the preternatural cohesion of the sily blood, on which cohesion, much of the increased vascular action that occurs in sthenic habits probably depends. This stimulus from the cohesion of sily blood, appears too, to have different effects on the pulse in acute, from what it has in chronic diseases, greater velocity being imparted in the former than in the latter cases, whilst increase of force takes place in both.

Ratio Medendi in inflammatory Fevers.

The modus operandi of blood-letting, and of other remedies in reducing the stimulus to morbid actions from cohesion should, I think, be

Reducing the stimulus from cohesion.

kept carefully in view by the practitioner, in order to distinguish between the healthful vigour given by healthy blood, so essentially necessary to animal existence, from the preternatural excitement consequent to morbid changes in that fluid. For, as blood is probably the pabulum of life, it should not be unnecessarily diminished; and even in cases where its physical properties appear to be altered, it is still so necessary to life, that it cannot be much reduced in quantity without proportionate risk to the patient.

Taking off the pressure at the great avenues of supply.

The *modus operandi* of bleeding, for the relief of diseased actions from sizzly blood, is chiefly to be explained, as I suppose, by its taking off the pressure at the great avenues of supply, on the entrance of the great blood-vessels into the organs of sanguification, particularly at the pulmonary and hepatic systems; for, whether the derangement of these functions arises, as I believe, from the disturbance of the balance between the vital power and chemical affinities engaged in them, or from other causes, yet the derangement would be increased, as we know that of the stomach is by ingesta, if before the natural adjustments of vital power are allowed more freely to take place.

These considerations, however, will be further extended in their application, when I come to treat of the epidemic Fevers of a typhoid character, and of the exanthemata in those

stages, in which they are unattended by sizy blood.

It is unnecessary to insist on the advantages of local abstraction of blood in the relief of local pain, and other symptoms of inflammation, from distension of the extreme vessels, as its *modus operandi* is so easily and obviously explicable on the foregoing principles. The peculiar advantages, however, of local abstraction of blood, will be illustrated by cases, in which leeches were employed for the relief of that local turgidity in the mesenteric and hepatic vessels, which so often precede or accompany dropsical infiltration into the abdomen or lower extremities.—See Succinct Account of Dropsy in succeeding pages. Also, Note 2, Appendix.

The peculiar advantages of local bleeding.

CASES OF EPIDEMIC DISEASES, WITH POST MORTEM EXAMINATION IN HORSES.

By favour of Mr. Watts, our eminent Veterinary Surgeon, I have been enabled to note the following case of putrid peripneumonia notha; for so, I think, that fatal distemper, which prevailed among horses in the autumn of 1828, may be denominated; at least I am not acquainted with any disease of the human species which it resembles so strikingly. This case and annexed dissections, however, are given as a link to connect inflammatory with typhoid Fevers; and further, to show the connection of the morbid changes in the blood, with the

symptoms which take place during the course of disease, as well as with the appearances found after death.

CASE I.

The case was that of a strong brown hunter, six years old, which four days before had been attacked with catarrhal Fever. On the 27th day of November, the day on which I saw this horse, the external signs of disease were those of weakness and fatigue. There was a constant changing of position, as if to relieve the weariness of the limbs, by alternately resting on them; the eyes were heavy and dull; the jaws somewhat rigid, but without trismus; the tongue and gums were paler than natural; and the head and roots of the ears appeared to me to be under the natural temperature. The symptoms, however, of chief distress, and those by which Mr. Watts prognosticated death as the almost inevitable issue were, difficulty of breathing, and a pulse 95; the respiration was deep and laborious, and quicker than the natural proportion between the inspirations and the beats of the arteries; this was more observable by the rising and falling of the abdominal muscles, than by the heaving of the chest. Mr. Watts, however, stated, that he had known recoveries to take place in other forms of disease after the pulse beat as quickly as 105 in the minute. On the appearances of the blood drawn, too, Mr. Watts founded much of his fatal prognosis. That which was left for my inspection, was dark and grumous on the surface, and when cut down into, the centre was almost as black, as ink and easily broken up. The serum which afterwards exuded from the crassamentum, in the utensil into which the blood had been received, but about two hours before, presented the appearance of a putrid sanies. On applying my ear to the sides of the horse, by Mr. Watts's suggestion, I heard those rales which

indicate obstruction to the passage of the air in the lungs, much more distinctly owing to the superior strength of the animal, than I had ever done in the human subject. This sibilant sound was perceptible over every part of the chest occupied by the lungs; and on these last symptoms, chiefly, it was that Mr. Watts founded his predictions of the morbid changes, which proved to be correct, in the examination of the bodies of other horses, shortly after they died, of distempers similar to that which has just been described. These general symptoms, with the appearances of the blood drawn, indicated the changes found after death in both cases.

Nov. 28.—There has been great improvement in the symptoms stated yesterday, and he now begins to eat his hay; respiration much easier, and those rales which indicated obstruction in the air-vessels over every part of the chest are greatly diminished; the sounds communicated to the ear, applied to the sides, are little more than those of the strong pulsation of the heart; the pulse is fuller and stronger, and reduced to 76 in the minute; has not been bled since I first saw him yesterday morning; but balls composed of tartar emetic, nitre, and camphor, which had been previously employed, have been continued, and he has been allowed to remain in the open air during daylight, conformable to Mr. Watts's practice in such cases. It should be observed, too, that the urine, and other alvine discharges have been freely passed, both in this and the case which ended fatally, the dissection of which will be given underneath: Mr. Watts further states, that in such cases in general, he finds the bowels obedient to purgative medicines; but, when actively administered, in such complaints, they are injurious.

Nov. 29.—Mr. Watts's report is not so favorable as that given yesterday, as considerable

and frequent intermissions of the pulse have taken place. The horse was yesterday removed to a field in the neighbourhood of the city.

For three or four succeeding days, I learned, progressive improvement took place in the appearance and general symptoms, during which time he had been left day and night in the field, and the balls of nitre, camphor, and tartar emetic, were continued to be administered twice a day. On the 2d day of December, however, all the former symptoms returned, accompanied with extensive anasarka of the integuments of the lower part of the chest. Bleeding was again employed, and the blood presented the same black clotted appearance already described; and the serum, when the clot was broken, had the same sanious and corrupted appearance.

3d and 4th of December.

Subsequently, anasarka of the chest was succeeded by a general dropsical tendency; for these symptoms, bleeding was again employed; but the blood was buffed, and firmly coagulated; and on resuming the balls previously in use, recovery commenced, and was ultimately complete.

CASE II.

With Post Mortem Examination.

Dissection of a horse three years old, about four hours after death, from the prevailing distemper.

On flaying the superior surface of the chest, the integuments which were thickly inlaid with fat, contained a large quantity of limpid and inodorous serum which Mr. Watts attributed to recent inflammation produced by the actual cautery he had applied over the part; but on cutting into the cavity of the chest, a putrid, and most offensive stench was immediately exhaled, and a putrid fluid sanies occupied it in

almost every part. There were no preternatural adhesions between the viscera and the surrounding membranes, neither were there between these membranes themselves, nor the parietes of the thorax. The surface of these membranes, however, had in general a palid hue; and the covering the diaphragm, in particular, was tinged with an ochery feculent colour. The heart and large vessels were turgid, and the blood which was still warm, flowed freely from any opening made into them, and was remarkably dark-coloured. On taking out the lungs, and cutting into them, they were found hepatized through every part; and in both colour and consistence, indeed, resembled the liver, which was placed beside them, excepting, that some of the large vessels in the latter viscus had preserved more of their natural calibre, than could be perceived in the former, where all besides the corroded margin of the lobes of the lungs, whether air or blood-vessels had partaken of the uniform solidity that pervaded the whole mass.

In the external appearances of the viscera of the abdomen, there were no signs of any morbid changes having taken place; besides, the general diffusion of a curdy serum, less discoloured and offensive to the smell than that in the thorax; neither did they, on being cut into and examined internally, present any thing very remarkable, except that the large vessels of the liver appeared unusually distended with blood, nearly as black as ink. There were no traces of inflammation on the surfaces, nor any adhesions between the membranes.

CASE III.

With Post Mortem Examination.

Dec. 27, 1828.

Post obit examination of a strong mare, four years and a half old, that died twenty hours

before of an affection of the lungs, which was designated by cough and difficult respiration, symptoms which commenced on the 19th instant. Blood drawn before death, Mr. Watts stated to be highly buffed; and for four days, whilst under his care, he could neither distinguish the sound of air passing through the lungs, nor the beat of the heart distinctly—there was no crepitous rale. There was a lameness in the right leg like paralysis during the four last days of life.

On the skin being flayed by the operator, the integuments were seen well supplied with fat; and in cutting through the abdominal muscles, the omentum, full of fat, protruded. The abdominal viscera presented no appearance of disease, excepting that the intestines were greatly distended with air, and the diaphragm was pressed down into it by the superincumbent fluid. On cutting into the thorax, and allowing the air to escape, there was no putrid effluvia such as was stated to have issued from the same cavity in the dissection already given, but several pounds of coagulable lymph of the same colour and consistence, Mr. Watts states, with the buff on the blood he had drawn, adhered every where to the parietes of the thorax, and on the right side in particular, connected the pleural covering of the lungs and ribs together;* in some parts the adhesion was very strong, in others the texture of the intervening coagulable lymph was loose, and easily broken down; the superior surface of the diaphragm bore the marks of high degrees of inflammation, and the lungs on the right side adhered strongly to it. The lungs on the right side were completely hepaticized, and on their upper surface, gangrene had taken place to a considerable extent.

The external colour of the lungs was dark,

* Mr. Watts attributed the lameness mentioned in this case to the adhesions found in the right side of the chest.

as in the dissection of the horse, already reported; but hepatization had not proceeded nearly so far in the lungs at the left side of the thorax, as those on the right side.

Numerous tubercles, apparently of long standing, were discoverable on the upper part of both lungs, and many of them were congregated at the anterior part of the bifurcation of the bronchi.

Mr. Watts calculates, that the fluid in the thorax, which was limpid, except where pieces of coagulable lymph floated in it, amounted to fifteen gallons.

TYPHOID OR ADYNAMIC FEVER.

I have already mentioned, that I consider typhoid or adynamic Fever to be generally symptomatic of morbid changes in the physical characters of the blood, and have as on former occasions, stated what those morbid changes are, viz. "the crassamentum is dissolved, or broken into fragments, tinging the serum with its colour, which is sometimes of a very dark brown, and sometimes of a greenish hue:"* but I have arranged inflammation under the head of symptomatic Fever, merely because it is more usually connected with some change in the structure of parts, discoverable after death; on the other hand, typhus Fever is connected with morbid changes, that primarily take place in the fluids, and produce morbid actions, and sometimes per-

Typhoid or adynamic Fever, symptomatic of morbid changes in the physical character of the blood.

* See my Treatise on Fever, &c. &c. page 19.—London, 1814.

manent changes of structure in the solid parts. These changes too, in the condition of the blood are distinguishable from those which we have stated to occur in inflammation; and the morbid actions excited relatively by these changes in the blood, are also distinct. In inflammatory Fever on the one hand, increased action; in typhoid Fevers on the other, debility, is almost the immediate consequence. On account of this debility being an essential character of typhoid Fevers, I denominated them adynamic.†

The cases of Typhoid Fever will be arranged under the heads of synchus, typhus mitior, &c.

The following cases of typhoid Fever will be arranged under the separate heads of synchus or mixed Fever, typhus mitior, and typhus gravior—to the various degrees of which, simple Fever may be said to bear the same relation that *cynanche tonsillaris* does to *cynanche maligna*—*variola mitis et distincta* to *variola confluens et maligna*—or *diarrhœa simplex* to *dysenteria typhoidea*. Indeed, in these, as well as in other countless instances, the presence of typhus Fever appears to me to be the chief cause of the different degrees of malignity which exist; as may be further illustrated by the different degrees of malignity and severity which attend simple Fever, or simple inflammation, succeeding parturition, compared with those which attend on puerperal Fever. Having, at the 27th and succeeding pages of my Medical Report,

* See my Pathological Observations, Part 1st. page 109.—*Dublin*, 1823.

from the Cork-street Fever Hospital, for the year 1823, stated my opinion, that the animal fluids are primarily and chiefly affected in typhoid Fevers by the generation, or introduction into the system, of a peculiar poison, or virus, I shall at present beg leave to refer to that statement, and only add, that these opinions have been further confirmed by all my subsequent experience.

CASES OF SYNOCHUS OR MIXED TYPHUS.

The following case is selected as a specimen of typhus, because it approaches more nearly to the congestive typhus of the London writers ; and, because, during the course of it, hemiplegic paralysis occurred, which is most likely to happen in such forms of typhus. Two other female, and two male patients were similarly affected in my wards, during my attendance in the months of April and May, two of whom recovered the use of the affected side ; one died, and the other, a young man, though many months free from Fever, is still paralytic and fatuitous, and I fear will continue so. In all these cases of paralysis, there were evident marks of congestion in the vessels of the head, such as flushed face, tinnitus aurium, and increased throbbing of the external arteries ; and in all of them, too, blood was abstracted by the application of leeches to the forehead and temples ; antimonial powders were likewise administered, on the principle which I have stat-

Case of congestive typhus, with paralysis.

ed in a paper, on the use of antimonial, or James's Powders, in hydrocephalus internus, published in the Dublin Medical Essays,* in the year 1805.

Anne Keys, an English woman, aged 68, was admitted into the wards under my care, April 11th, 1828. Illness commenced the evening of the 6th inst. with strong rigors, that were succeeded by head-ache, loss of appetite, and by restlessness; has lain prostrate in bed since admission, somewhat comatose, coma accompanied with muttering and moaning in her sleep. On being roused, she speaks incoherently, and with difficulty can be made to give a distinct answer, when questioned as to the commencement of her disease, or as to its symptoms. She then complains of extreme debility, and craves wine for her support; face darkly flushed; skin warm, but clammy; there are numerous small dark petechiæ on the back and shoulders; tongue dry, and longitudinally striped with red and brown colours; thirst urgent; feels a sense of uneasiness at her head, and noise in her ears, but says it does not amount to pain. The bowels have been well freed by purgatives, taken before she left home; the alvine discharges very dark and offensive; urine passed unconsciously; pulse 130, small and unequal; more irregular in the left than in the right side; the extremities on the left side are nearly useless; and it appears to be with great effort that she can even move them; mouth drawn considerably. Prescribed—The head be immediately shaved, and washed with camphorated spirits of wine, and covered with a flannel cap; a blister to the nape of the neck, and 15 leeches to the temples; a tablespoonful of barm mixed with water every third hour; an enema

* See Dublin Medical Essays, vol. i. A. D. 1805.

to be immediately administered, and repeated in the evening, if necessary ; low diet.

Sumat pulveris antimoniales, gr. ii. ter. indies.

By these remedies repeated, according to circumstances, the symptoms of congestion in the head were relieved, but those of typhus continued unabated for several days ; on account of which, three ounces of wine, largely diluted, were allowed daily, until convalescence commenced, with a craving appetite ; and she was put on the middle diet of the Hospital. On my return to the intern duty, in August, I found her still paralytic, but free from Fever. She was subsequently, however, attacked with typhoid symptoms, from which she with difficulty recovered ; but the paralysis has remained still stationary. This patient, still paralytic, remained in the Hospital at the close of the year 1828.

P.S. This woman having no home, continued in the Hospital until January, 1829, when she died apoplectic.

CASES OF TYPHOID MITIOR.

Joseph and Mary Sheppard, aged 64 and 40, and their son, James Sheppard, aged 14 years, were admitted on the 11th of December, 1827, with precisely the same symptoms ; all had been attacked with rigors in the same manner, on the 5th of that month. They complained of a general sense of weariness, loss of rest, sickness, and oppression at the stomach ; tongue brown and striped ; quick pulse, rather hurried respiration ; belly costive ; thirst urgent ; slight delirium at night ; they were all treated too in the same manner, by purgatives, so as to free the bowels, daily ; by warm affusion on the face, neck, and arms ; by fomentation of the feet for half an hour each night ; by barm,

with camphorated mixture on the third day after admission. The father and son were convalescent on the 16th; the woman had a favourable but imperfect crisis on the 17th. The recoveries of the former went on progressively, but very slowly to the 28th of January, 1828, when they were dismissed free from complaint: neither of these two had got any wine; but the woman relapsed on the 19th, with symptoms of greater debility than she had when admitted: there was then some coma; great oppression of bodily and mental power; petechiæ reappeared more generally, and of a darker colour; great oppression at stomach, and frequent vomiting, which was sometimes green; there was yellowish tinge over the eyes, and generally over the surface of the body; alvine discharges scanty, and orange coloured; urine turbid, presenting that appearance which the older writers describe as the "*urina flammea*;" she felt considerable uneasiness in her bosom the last 24 hours, and said she left a child of 9 months after her at home, which she had been suckling until the commencement of the illness—the mammæ, however, do not appear to be preternaturally distended. The head was now directed to be shaved, and washed with camphorated spirits of wine; the mammæ and feet to be fomented, and the axillæ to be bathed in warm vinegar; five grains of blue pill three times a day, were directed to be assisted by turpentine fœtid enemata; the abdomen, which was somewhat tympanitic and sore, was directed to be rubbed with a liniment of equal parts of turpentine and ammoniated oil; and a blister to be applied to the nape of the neck. For several days the symptoms of relapse proceeded unabated; and, besides the remedies already mentioned, barm was given; and, to allay the vomiting, compound infusion of mint, assisted by anodyne starch enemata, was administered; at length the distressing symptoms were relieved; but

debility remained so urgent, that the wine, which, two days after the relapse, was commenced with three ounces daily, was on the 23d, increased to five ounces; and, together with a fuller allowance of broth, and a more generous diet, was continued to the 29th of January, when, at her own request, she was dismissed free from complaint, though still feeble. These three cases are given as specimens of typhus, arising from contagion, and the two former as cases of typhus mitior, as the symptoms were in general less urgent than in those which follow.

The two following cases of synochus, or mixed typhus, are taken from the upper ranks of life, in order to illustrate how far the course of our indigenous Fevers is influenced by the previous condition of the patient.

Cases of our indigenous Fevers in the upper ranks of society.

A gentleman, in his 19th year, who had consulted me a short time before, on account of an affection of his stomach, which seemed to be connected with a dark pimply eruption, which appeared occasionally on part of the face, and more lately on the back of the right foot, and there assumed a plegmonous character, and was slow in healing, again called on me, on the 5th of May, a few days after his return from his country residence. He had been attacked with rigors two days before; and these were succeeded by headache, confusion of thought, and sleeplessness, by total loss of appetite, and sickness of stomach. Having had several ephemeral attacks of indisposition, with symptoms somewhat like the present, he expected this would cease in the same manner. In the course of the preceding night, however, though his bowels had been moderately opened by medicines, directed by his family apothecary, Mr.

Clarke, he found his indisposition to increase : and after a restless night, he complained much of sickness and oppression at his stomach, and of a general feel of weakness, and great debility : face darkly flushed ; considerable headache ; pulse 130 ; tongue brown and striped ; skin hot, but rather moist ; eyes slightly suffused ; several large petechiæ were scattered over and between his shoulders. The last alvine discharges dark and offensive ; urine scanty and turbid. Prescribed—an emetic of tartarised antimony : and in the evening, the head not being relieved by the emetic, it was directed to be shaved, and washed with camphorated spirit of wine ; 15 leeches to the temples ; a purgative enema to be administered ; the feet to be fomented for half an hour with flannels, wrung out of hot water, and a plentiful supply of barley and toast water for drink.

MAY 6th—No abatement of the symptoms, except the headache, which is somewhat relieved ; but all the characteristics of typhus were increased, and presented an exquisite form of petechial Fever.

To oppose these typhoid symptoms, the bowels were kept moderately free, by blue-pill, saline aperients, and enemata ; barm, and camphorated mixture were administered every third hour ; claret diluted, was commenced with the quantity of four ounces in the day and night ; when tendency to coma, or low delirium appeared, blisters to the nape of the neck were applied ; and green tea allowed in addition to the other drinks. For several days, however, all the symptoms increased, there was considerable subsultus tendinum ; some green vomiting occurred ; and the alvine discharges were orange colour, or malænous. The petechiæ more dark and extensive ; and the interstices of the skin somewhat icteric. On the 17th day from the

attack, there was a regular crisis, and recovery afterwards proceeded steadily, and he has since been freer from those eruptive and stomach complaints, which preceded the attack, than he had been for several years before.

CASE III.

Miss ———, 20 years of age, full habit ; was attacked with rigors on the 21st of July, 1828, which were succeeded by the usual symptoms of Fever, accompanied with some cough, and great depression of spirits, and loss of rest. These symptoms, under the due freedom of the bowels, and an antiphlogistic regimen, as directed by the medical attendant, Mr. Sheridan, of Lower Merrion-street, did not increase in urgency till the night of the 31st of July. But, on the 1st of August, I found her lying prostrate, with other marks of extreme debility, moaning, and muttering in her imperfect sleep ; she was comatose, and spoke incoherently when roused : the skin was clammy, and less warm than natural, particularly on the extremities, and thickly spread over with dark crescent-formed petechiæ, especially on the back, shoulders, and bosom, and the interstices of the skin were jaundiced. The tongue was swelled, and longitudinally striped with dark red, and brown, and was dry in the centre ; pulse 140, small and indistinct, whilst placed on her back, but when turned on her left side, it was reduced to 130, and was more distinct, and fuller than before ; the teeth partly covered with a dark semicarneous tunick ; eyes suffused, and pupils more dilated than natural, and continue so on the near approach of light ; did not complain of thirst, but drank with ease ; complained of tinnitus aurium ; three alvine discharges since yesterday ; the two last dark and fetid ; and within the last two hours, they, as well as the urine, have been passed unconsciously ; the fundus of the bladders can

be felt above the symphysis pubis; but the abdomen is neither tumid nor tympanitic; complains of pain from the slightest pressure made either at the epigastric or hypogastric region; has had some green vomiting, and hiccup, within the last 24 hours. Prescribed—let the head be immediately shaved, and afterwards bathed three times a day with camphorated spirit of wine, ; a flannel cap.

Postea applicetur emplastrum vesicatorium nuchæ. Injiceatur enema emolliens cum olei Ricini unciâ at olei Terebinthinæ drachmis duabus. Sumat misturæ camphoratæ unciam cum spumæ cerevisiæ semiuncia tertiâ quaquâ horâ.

Let the drinks of barley and toast water be continued; besides, let her have six ounces of port wine, diluted with twelve of water, during the night; let the hypogastrium be fomented with flannels, wrung out of hot water.

August 2d—Enemata have operated well; and there has been a copious discharge of dark-coloured and offensive fœces, the last time with consciousness, after the fomentation of the hypogastrium; there have also been a copious discharge of urine, which is turbid, and high-coloured, but without any deposit; took twice the quantity of wine ordered at the last visit, and would have taken more; muscular power, as well as mental energy increased; pulse 120, and distinct; got tranquil sleep for an hour in the night; some green vomiting this morning, and the soreness at the epigastrium extending to the right hypochondrium, continues; the skin is warm and moist, but not clammy; and the petechiæ are considerably faded, but the yellowness of the skin is increased; the tongue is more equally red, and softer; the eyes are less suffused.

PRESCRIBED,

Rx. Pilulæ Hydrargyri, gr. duodecem, Camphoræ, gr. tria. Syrupi, q. s. Tere simul et in divide pilulas, tres equales. Signa Sumat unam octavâ quâqua horâ. Applicetur emplastrum vesicatorium hypochondrio dextro. Curetur pars nuchæ vesicata unguento spermatæ cæti. Repetantur alia heri prescripta.

Let half a pint of claret, mixed with an equal quantity of water, be given every twelve hours, together with the quantity of wine directed yesterday.

August 3d—Had a good night, and is much better in every respect; all the medicines, prescribed, have been taken; the alvine discharges have assumed an orange colour; and the urine deposits a copious saline sediment; the petechiæ and yellowness of the skin have nearly disappeared; pulse 100, full and soft; asks for broth and flummery. Prescribed—let her have a small quantity of chicken broth every third hour through the day, and a little flummery, with milk and sugar in the evening.

Rx. Decocti cinchonæ, Infusi rosæ, āā unc. sex. Syrupi aurantii, unciam unam, Acidi vitriolici dilut. gutt xxx. M. Sumat cochlearia ampla tria tertiâ quâque horâ. Omittantur alia.

Recovery afterwards advanced rapidly, with little more than attention to restorative diet, and a regular and due discharge from the bowels. In the month of September, by my advice, she was moved into country air, by which, and the use of ass's milk, health has been completely re-established.

TYPHUS GRAVIOR.

The two following cases of typhus gravior, are examples of that form of it, which so frequently, Typhus gravior
or terminating
in gangrene.

terminated in gangrene of the extremities, in the course of the preceding six years. Thomas and Elizabeth Williams, man and wife, Welch people, were attacked by our indigenous Fever, as it appeared, from exposure to contagion, soon after their arrival in this country.

CASE I.

Elizabeth Williams, 28 years of age, was admitted the 5th of April, 1828. Her illness commenced on the 29th of March with rigors, and sickness of stomach, succeeded by great debility, and total loss of rest and appetite.

APRIL 6th—Passed a restless night; and during short intervals of imperfect sleep, there was much moaning and low muttering; when roused, she spake incoherently, and with great difficulty could bring any part of her previous illness to her recollection; not even the manner and period of its commencement, though she had related it to Mrs. Bridges, the head nurse, as stated above, immediately after admission. The tongue, which was protruded with great difficulty, was tremulous, dry, and longitudinally striped, of a dark red and brown colour; she quickly relapsed into coma, and lay prostrate on her back; breathing somewhat laborious, with frequent deep sighing; the pulse very quick, and indistinct; skin clammy, was jaundiced, and thickly dotted, especially over the shoulders and bosom, with irregularly shaped petechiæ; eyes were suffused, and icteric; there was considerable subsultus in the hands as she lay upon her back, with some tremor very generally; the nails, both on the hands and feet, particularly on the latter, were livid; swallowed the fluids poured into her mouth with some difficulty; the pulse was more distinct when she was turned on her side, and was about 120; an

acid fœtor was exhaled from her; belly costive, and somewhat tumid and tympanitic; urine passed unconsciously under her. Prescribed—let the head be shaved, and washed three times a day with camphorated spirit of wine; a flannel cap.

Rx. Pilulæ hydrargyri, gr. duodecim, Camphoræ, gr. triâ, Syrupi, q. s. Tere simul et divide in Pilulas tres æquales. Sumat unam quartâ quâque horâ cum uno haustum sequentium.

Rx. Olci Ricini, drachmas sex, Olei Terebinthinæ, unciam unam, Mucilaginis, q. s. Aquæ Pulegii, unciam unam, Fiat haustus. Mitte tres tales. Nisi prius solveret alvus, injicietur enema terebinthinæ cum spumæ cerevisiæ cochleare amplo vespere et repetatur cras mane diluculo. Sumat spumæ Cerevisiæ, semi-unciam cum misturæ camphoratæ unciauna, tertiâ quâque horâ. Wine, four ounces. L.D.

April 7th—No improvement in any symptom; on the contrary, the hands and feet have become purple, and the petechiæ have extended, especially over the cheek and hip bones, so as to become large purple maculæ; pulse very quick, feeble, and indistinct, but improved, as already noticed, when the patient is turned on the left side; some green vomiting and hiccup. Prescribed—Laventur pedes et manus spiritu vini camphorato et postea tegantur panno laneo. Repetantur omnia ut heri prescripta sunt. Wine, six ounces.

APRIL 8th—Symptoms of debility, and coma increased; pulse quick, weak, and small, but improved when the patient is turned on the left side; jaundice and petechiæ increased; and gangrene of the feet has commenced near the toes; the acid fœtor is still exhaled from the body, and the alvine discharges are black and offensive; but she is more conscious of them than she was yesterday; she also swallows bet-

ter, and has taken all her medicines, and her wine with avidity. Repetantur remedia. Wine, eight ounces.

APRIL 2d—The skin is now broken on the feet, near the toes, and discharges a fœtid ichor ; some improvement in muscular power, and the pulse more distinct ; purgative medicines have operated well, but the green vomiting and hiccup continues ; other symptoms stationary ; relishes her wine, and craves more. Applicentur cataplasma fermentantia pedibus affectis. Omittantur pilulæ hydrargyri et haustus oleosi. Repetantur alia. Wine, ten ounces. Let her be visited by the Surgeon.

No material change in the symptoms occurring, there was none made in the remedies, until the 14th, when the green vomiting, hiccup, and tension, and soreness of the epigastrium, which had previously somewhat abated, again returned ; jaundice too, was considerably increased. Prescribed—Sumat Pilulæ hydrargyri, gr. v. octavâ quâque horâ. Applicetur emplastrum vesicatorium epigastrii et hypochondrii dextro tendens. Repetatur mistura camphorata cum spuma cerevisiæ, et sumat infusi menthæ comp. cochleare amplum urgente vomitu. Injicietur enema purgans quartâ quâque horâ ad alvi solutionem. Sumat decocti cinchonæ, uncias tres quartâ quâque horâ.

APRIL 20th—The typhoid symptoms have gradually subsided under the treatment prescribed on the 14th inst. and it has been continued with little variation since, except the addition of an anodyne draught every second night ; appetite and rest have returned ; the tongue is clean and soft ; alvine discharges, which, from being black, had assumed an orange, or *ochre colour*, have now their natural appearance ; the urine passed copiously, has also its usual appearance,

instead of that of the *urina flammea*, which it previously had ; the gangrene and livid appearance of the left foot has totally vanished, but it has completely destroyed the integuments covering the bones of the toes, and the metatarsal bones of the right, nearly to the middle of the instep ; the ulceration appears to have extended through these integuments, from the centre upwards and downwards, and the periostium of the bones appears to be only in an incipient state of ulceration. The parts immediately next to the gangrene have assumed a healthy appearance. Prescribed—*Repetatur decoctum cinchonæ.* Wine, eight ounces. M.

APRIL 23d—Her recovery has proceeded in every respect, excepting the gangrene of the right foot, which is now circumscribed to all that part of it, beneath the instep, and in which necrosis has taken place. Prescribed—*Continuentur omnia.*

APRIL 24th—Soon after the visit yesterday, she was attacked with an aguish paroxysm, which went through the regular stages : and now, at 11 o'clock, A.M. she feels the rigor supervening.

Prescribed—*Sumat statim haustum emeticum ex aquæ tepidæ, unc. ii. Pulv. Ipecachuanhæ, gr. xv. Autimonii Tartariz. gr. i. Et postea bibat. Infusum Chamæmeli ad promovendum vomitum.* Foveantur pedes et manus panno laneo aquæ cælidâ madefacto. Nisi prius solverit alvus injicietur enema vespéré. *Sumat sulphatis quinae, gr. ii. ter indies.*

APRIL 30th—The aguish paroxysms have become gradually milder since the 24th, and health and strength have been progressively improving ; the necrosis of the foot has not extended, but is confined in the parts already described. Full diet, and generous allowance of wine ; and

the preparations of bark already mentioned, were continued till the 8th of May, when she was removed to the surgical wards of Dr. Steven's Hospital, that the diseased parts of the foot might be amputated; and soon afterwards I learned, she returned home to Wales in good health.

CASE II.

Thomas Williams, a Welsh man, aged 42, husband to the last-mentioned patient; was admitted, April 15th, 1828, from the same lodgings which had been occupied by his wife. He had been six days ill previous to his admission; he described the mode of attack to be very similar to that of his wife; there was also a striking similarity between their general symptoms; he lies prostrate on his back, and is comatose, but answers coherently when strongly roused; complains of a general sense of weariness, and pain in every part; of tinnitus aurium, and prickling heat in the skin; the colour, and irregular shape of the petechiæ, and lividity of the toes and fingers, the same as described to have affected his wife on admission; the skin is hot and jaundiced, but soft; the eyes also jaundiced, and somewhat suffused; tongue dry, and striped with dark and brown colour, tremulous when protruded; the hands are also tremulous when raised, and there is considerable subsultus; belly costive, tumid, and tense; urine sometimes passed unconsciously; but what appeared in the utensil is high coloured; has had some dark bilious vomiting since admission; and there is considerable tension and soreness at the epigastrium; pulse 130, and feeble; drinks with ease, and craves wine.

Prescribed—*Tondetur capillitium. Postea lavetur caput spiritu vini camphorato et tegatur panno laneo. Laventur pedes et manus etiam spiritu vini camphorato et tegantur panno laneo.*

R_x Pilulæ hydragyri, gr. xij. Calomelanos, gr. xij. Gum. Assæfætidæ gr. v. Syrupi, q. s. Fiat massa. Tere simul et divide in pilulas granorum quinque. Sumat unam octava quaque horâ.

R_x Olei ricini, dr. v. Olei terebinthinæ, dr. i. Mucil. gum. Arabici, q. s. Aquæ pulegii, unciam. Tere simul fiat haustus statim sumendus. Injiciatur enema cum spumæ cerevisiæ cochleare amplo, terebinthinæ drachmis ii. quartâ quâque horâ ad alvi solutionem. Fricetur abdomen linimento ex olei amemoniati et olei terebinthinæ (p. æ.)

Sumat misturæ camphoratae unc. i. cum spumæ cerevisiæ semunciam, tertiâ quâque horâ. L. D. Wine, three ounces.

APRIL 16.—Has used his medicines regularly, and they have produced much dark feculent discharge: still complains of general debility and sickness. Feet and hands, particularly the former, are livid, and the toes and back of the left foot purple. Has had some dark bilious vomiting this morning, and has had great oppression at stomach. Other symptoms stationary.

Prescribed—Bibat infusum⁷ chamæmeli tepidum ad promovendum vomitum. Applicetur emplastrum vesicatorium Hypochondrio dextro. Fricentur pedes et manus, oleo terebinthinæ.—L. D. Wine five ounces. Repetantur alia.

APRIL 17.—Medicines have operated well: there has been no return of vomiting, and the subsultus tendinum and coma are rather less: other symptoms stationary.

The succeeding part of this case so nearly resembled that of the patient's wife, except that the gangrenous appearances of the feet was arrested before any of the parts were destroyed,

that it would be needless to detail it; it is sufficient, therefore, to mention that shortly after his convalescence from the typhoid disease, he also was attacked with ague, and that the paroxysms soon yielded to emetics and the sulphate of quina; the doses and entire quantity of sulphate of quina, given in this and the preceding case, will be seen in a Table which will exhibit the result of all the cases of ague that passed under my care, in the months of April and May last.

This patient was dismissed free from complaint on the 4th of May.

Fatal case, after the disappearance of the purpura, and in which salivation seemed to be injurious.

The following case of Typhus Gravior is extracted from the journal of my private practice, and is remarkable on two accounts; 1st, its terminating fatally, after the purple colour of the feet had disappeared; and 2dly, because salivation, on which so much reliance is placed by some authors, had been produced by mercury, at an early stage, without any remission, of the symptoms being observable as the consequence of it.

Mrs. —, aged 38, mother of several children, whom she had with laborious parturition, that was succeeded by mœnorrhagia, but she was afterwards healthy, till about the 14th of Aug. 1828, when she was attacked with symptoms of Fever, that proceeded rather insidiously for some days; and though apparently relieved by aperients and antiphlogistic regimen, judiciously prescribed by her medical attendant, Mr. Delany, of Thomas-street, yet, in the latter part of the month, the worst characteristics of typhus Fever set in; and when, accompanied by Surgeon Halahan and Mr. Delany, I

saw her, on the 30th of August, she lay prostrate from debility; comatose, unless when strongly roused, but then answered coherently; did not complain of pain in any part, but of great sense of weakness, palpitation of heart, and tinnitus aurium; the skin was clammy, and covered over with dark irregular-shaped petechiæ, the interstices jaundiced; and the eyes, much suffused, were also jaundiced. Swallowed with ease, but the stomach frequently rejected what was taken into it, and the vomiting was at times of a grass-green colour; the alvine discharges dark and offensive; the urine high-coloured and turbid. Pulse 108, with some intermissions, and very feeble, but improved in distinctness on turning the patient on either side. Tongue brown, and striped longitudinally, was protruded with difficulty, and was tremulous. Hands also tremulous when raised from the bed. Considerable soreness on pressure over the epigastrium and right hypochondrium.

Prescribed—The embrocation of camphorated spirit of wine to the head to be continued. Also the barm and camphorated mixture already in use. *Laventur facies et pectus aquâ tepida cum aceto. Applicetur emplastrum vesicatorium nuchæ. Sumat pilulam hydrargyri gr. v. ex haustu infusi rhei. Fricetur abdomen, olei ammoniati et olei terebinthinæ p. æ. Injicietur post horas tres, enema terebinthinatum cum spumæ cerevisiæ cochleare amplo. Let the claret be increased from four to six ounces in every twelve hours.*

AUG. 31.—Got some quiet rest in the night, and seemed somewhat better when she awoke; but no improvement in the symptoms in general, except that the pulse was somewhat fuller, and with less intermission. There appears to have been a considerable degree of pa-

ralysis of the left side, and large purple maculæ on the side and back of the left foot; the subsultus tendinum is also more general and stronger; green vomiting frequent and severe. The alvine discharges have this morning been passed unconsciously; but no urine passed for the last eight hours; and the fundus of the vesica urinaria may be distinctly felt, above the symphysis pubis. There is considerable soreness of the gums, with some ptialism.

Prescribed—Let the catheter be employed as often as the collection of urine in the bladder indicates its necessity. *Omittatur pilula hydrargyri. Repetantur alia heri prescripta. Sumat misturæ moschataë cochleare amplum omni bihorio. Applicetur emplastrum vesicatorium hypochondrio dextro. Laventur pedes et manus, spiritu vini camphorato et tegantur panno laneo. Wine (Madeira) eight ounces. Decoctum hordei ad libitum. Infusion of green tea.*

SEPT. 1.—Had a tolerably good night, and there was a slight amendment in the pulse; but the symptoms in general were not improved. The urine drawn off by the catheter was high-coloured and turbid; the alvine discharges dark and offensive; the vomiting less frequent, but what was rejected was of a grass-green colour. The purple colour of the foot was rather extended, and the paralysis was still more obvious. Ptialism continued.

Prescribed—A repetition of the musk mixture; the rhubarb draft, and turpentine enema; an ice cap for twenty minutes at a time, to the head three times a day; the wine, tea, and other drinks in use, to be continued.

It would be needless to report the progress of the symptoms, which advanced in severity until the 7th of September, when death closed

the scene ; further, than that all the signs of debility increased, together with those of effusion on the brain, such as strabismus, dilatation of the pupil, suffusion of the eyes, during the last twenty-four hours, until the pulse, and other vital functions ceased, apparently from exhaustion. The purple colour of the foot disappeared two days before death, without any breach in the integuments, and seemed to be connected with internal metastasis ; and the symptoms of effusion on the brain were more distinctly manifested. I shall only add, with respect to the ptialism which occurred without relief, that I have seen the same happen lately in many cases in private practice,—but shall advert only to that of a professional friend, whom I attended, assisted by Dr. Marsh and Dr. Davis, in the month of October last. In that case the green vomiting, with other symptoms of derangement in the biliary system certainly did not subside on the supervention of the ptialism. But a favourable crisis seemed, as in many other cases I have known to happen, to be connected with the formation of piles, at the extremity of the rectum ; and although very painful and distressing in this instance, and on account of their enlargement and livid colour, demanding vigilant attention, yet manifestly they were the immediate precursors of a cessation of Fever.

RATIO SYMPTOMATUM.

Having in the preface to these specimens of the various forms of typhus Fever, re-stated my opinions previously expressed on various occasions, that such forms depend on morbid changes in the blood, and also adverted to these changes themselves, I have now only to add, that they appear to me to be intimately con-

The morbid changes in the blood in typhus Fevers connected with failure in its vitality, & with derangement of the organic affinities that subtend to vital power.

Catenation between the primary and proximate cause of typhoid Fevers.

nected with disturbance or failure of the vital power in the vital functions of sanguification, as well as indirectly with derangement of those organic affinities which subtend to that vital power. Between the primary and proximate cause of disease, it is indeed most difficult to discover uninterrupted catenation ; but in this instance, they appear to me to be connected by links, some of which, at least, are manifest. The prostration of vital and animal power, by which we can first trace the commencement of typhus Fevers, has been often known proportioned to the impurity of the air, previously respired by the patient, or the virulency of the contagion to which he had been exposed. This has been found to happen, more particularly with respect to jail Fever, and the plague. The predisposition to their attacks has also been proportioned to the degrees in which moral and physical causes of a depressing nature had been previously applied. The changes in the condition of the blood, wherever it has been examined, have corresponded with the external signs of disease, and have approached to such as are found to follow the introduction of poison into any part of the sanguiferous system, or to what more suddenly takes place in those killed by lightning.

These views of the exciting causes of pestilential Fevers, the same with those taken by Dr. Meade.

In Dr. Meade's History of Pestilential Fevers, which I also quoted in my Reports for 1823, when an indigenous Fever assumed similar characteristics, he concludes as follows :—

“ Pestilential Fevers, in fine, I call all those which are accompanied with some sort of poison. Now, of whatever nature this happens to be, it not only infects and corrupts the blood, but more particularly seizes upon the subtile nervous liquor. Hence it is, that these Fevers act with greater rapidity and violence, and are much more fatal than the common sorts.”*

This, too, corresponds with the description of pestilential Fevers in remote ages, as appears from the following translation of a passage from Lucan, quoted by Dr. Meade. And at remote periods.

“ And as Corycian saffron, when ’tis squeez’d,
Pours forth its yellow juice through all the holes
Of the hard pressing boards ; so from the pores
Of all the parts flow’d ruddy venom’d gore.
His tears were bloody ; nature’s passages
For their own humours were all fill’d with blood,
His mouth, his nose, chok’d up with filthy clots :
Red sweats transpir’d from all the skin inflam’d,
His body seem’d one universal wound.”

In typhoid or adynamic Fevers, the same morbid changes take place in the blood, and afterwards, in proportion to their degree, become the source of morbid actions. Such changes are, I think, all referable to diminished vitality in the functions of sanguification, and to the consequent disturbance of those organic affinities which subtend to that vitality. The same morbid changes in the blood produce corresponding degrees of severity in adynamic Fevers.

But whilst I attempt to point out those links

* See Medical Works of Richard Meade, M.D. page 233.

The actual changes that occur in the physical character of the blood, in Fevers, to be considered altogether distinct from any abstract reasoning as to the causes of those changes in the chain which connect the primary and proximate cause of typhoid Fevers, I beg leave, as when explaining the alterations of the blood in inflammatory Fevers, to separate the consideration of the actual change that takes place in the blood from any reasoning, in explanation of it, which otherwise might confound it with physiological speculation, already the source of much error in pathological enquiries. This speculation here indulged has, however, been the result of close observation during the course of diseases; and perhaps it is only in the interruptions to the healthy functions, which then take place, that even a passing glance of the distinct powers employed in those schematisms, or latent processes of nature, is afforded, so as to render them cognisable to the senses; in the same manner as the partial fracture or destruction of a crystal, assists to discover the mode of arrangement, on which its primitive formation originally depended.*

References illustrative of the author's physiological speculations.

On former occasions I have referred to the illustrations of my physiological speculations, afforded by the examination of the blood, and of its action in the different phenomena of life, by Doctors J. L. Prevost and J. A. Dumas;†

* See Note 2. Appendix, cases to show how organic diseases may originate in the fluids, &c.

† Vide examen du sang, et de son action dans les divers Phénomènes de la vie, par J. L. Prevost, M. D. et J. A. Dumas Elève de Pharmacie, Membre de la Société de Physique et d'Histoire Naturelle de Geneve.

likewise to the experiments of Magendie and Barry,* to elucidate how alterations in the physical characters of the blood, excite constitutional derangement; and on proceeding to account for the symptoms of typhus Fever, I beg to refer more particularly to the experiments of the last-named physiologists, and those by B. Gaspard,† D. M. à Saint Etienne, for the aid they afford in the illustrations of this subject, as well as of my principles of pathology in general.‡

* Vide Note sur l'introduction des liquids visqueux dans les organes, de la circulation, et sur le formation du foie gras des oiseaux, par M. Magendie.—*Journal de Physiologie expérimentale. A Paris*, 1821.—Tome i. 1^e Numero.

† Vide Memoir Physiologique sur les maladies purulentes et putrides, sur la vaccine, &c. par M. Gaspard, D. M.—Vide Second Memoire Physiologique et Medicale sur les maladies putrides, par M. Gaspard, D. M.

‡ With respect to the symptoms produced by those changes in the physical characters of the blood as indicated by its buffy coat or siziness in inflammatory Fevers, I am induced to quote the following extract from the results of M. Magendie's experiments, made by introducing viscid extraneous liquids into the organs of circulation.—After stating the sudden and fatal consequences of their introduction into the jugular vein, or into the branches of the pulmonary artery, he proceeds,^a “ Je voulus donc essayer quel serait l'effet de l'huile, injectée dans la veine porte, et j'en introduisis environ deux onces, au moyen d'une petite seringue, par une ouverture faite à l'une des branches mesentériques de cette veine; le chien sur lequel je fis cette expérience resta pendant plusieurs jours, dans un état voisin de la mort, couché sur le côté, respirant avec difficulté, ne faisant aucune mouvement, pas même pour les excréctions naturelles, qui semblaient se faire involontairement. Mais après quatre jours, il commença à revivre à lui, il prit quelques aliments, et trois autres jours suffirent pour la ramener à la sante.

“ Au bout d'huit jours, je voulus faire de nouveau l'injection de

^a See case and sectio Cadaveris, 1st Part of Pathological Observations, page 17 to 28, inclusive.

General symptoms indicative of the morbid condition of the blood.

Although the first symptoms of typhoid or adynamic Fever, such as nausea, oppressed or hurried breathing, sighing, oscitation, and si-

L'huile, et je la fis en effet de la même manière ; mais j'en injectai trois onces au lieu de deux. Les mêmes symptômes se montrèrent ; et l'animal mourut dans la nuit. Je l'ouvris le lendemain matin ; les vaisseaux contenaient ça et là quelques traces d'huile, mais le foie surtout attira mon attention ; ce viscère était beaucoup plus gros que de coutume, sa couleur était d'un jaune pâle rosé, des petites fissures irrégulières se voyaient à sa surface, et ne paraissaient pas récentes ; sa couleur intérieure était analogue à celle de sa surface ; en somme, l'organe avait la plus grande analogie avec le foie gras des oiseaux."

The whole of these experiments, indeed, are illustrative of my pathological principles ; but I must curtail my extracts from them, in order to avail myself of the still more remarkable illustration of those principles, both as regards inflammatory and typhoid Fevers, afforded by the experiments of B. Gaspard, D. M., made by him, to ascertain the action or effects of the natural animal fluids, when introduced in a morbid or decomposed state into the circulating system, and appear to me well suited to elucidate the theory of diseases. The result of his sixteenth experiment is indeed so applicable to the subject of typhoid Fevers, under the most malignant forms, that I beg leave to quote it in full, and at the same time refer to his two physiological memoirs, published in the 2d and 4th volumes of the *Journal de Physiologie*, for the very important information they also afford on this subject :

"*Exp.* 16^e. Le 14 Juillet, 1821, j'ai donc injecté dans la jugulaire droite d'un chien d'assez grande taille deux onces et demie de liquide fétide, épais, nullement acide, et provenant de feuilles de choux fermentées pendant deux jours à 20° R. de chaleur dans un égal volume d'eau. Pendant l'injection je vis exécuter plusieurs mouvemens de déglutition à l'animal qui ne tarda pas à vomir plusieurs fois et à tomber dans l'abattement. Quelques heures après, malaise très-grand ; poitrine douloureuse à la pression ; respiration embarrassée, difficile et plaintive ; apparence de péripneumonie, puis nouveaux vomissemens, et grand abattement tout le jour. Au bout de neuf heures, dans la nuit, selle liquide très-copieuse et très-fétide, noire comme de la suie, analogue aux déjections du *mélana*,^a

^a "Ce fait, que M. Gaspard a observé le premier, est des plus remarquables ; il met évidemment sur la voie de la cause des vomissemens noirs qui ont lieu dans la fièvre jaune, certains typhus, etc. M.

milar signs of debility are probably the consequence of the first impressions made by the exciting cause, be that impure air, malaria, or

et formée d'un peu d'excrémens et de mucosités avec beaucoup de sang comme pourri. Quelque tems après, le chien en rendit une seconde toute semblable, mais uniquement mucoso-sanguine....Le 15 Jouillet, abattement plus considérable ; adynamie ; décubitus latéral, ou bien démarche vacillante ; pouls petit et fébrile ; soif ardente et comme inextinguible ; même dégoût, urine naturelle et assez abondante, respiration libre et faible. Mais ce qui me frappa surtout, à plusieurs reprises dans la journée, ce furent des battemens de cœur revenant par intervalles, avec une force et un bruit extraordinaires, comme dans le plus fort degré de l'anévrisme avec hypertrophie de cet organe... Le 16, un peu mieux, abattement moindre ; cessation des battemens désordonnés du cœur ; mais toujours soif très-vive ; refus d'alimens ; fièvre ; et quelquefois vomissement des boissons....Le 17, même état que la veille....Le 18, symptômes aggravés ; faiblesse extrême ; démarche tout-à-fait chancelante ; soif excessive ; yeux rouges, enflammés, et remplis de chassie ; narines tuméfiées, obstruées de mucosités, avec espèce d'enchifrenement, et gêne ou empêchement du passage de l'air ; membrane muqueuse de la bouche rouge-violette et phlogosée....Au milieu de la journée, selle liquide, grise-blanchâtre, avec quelques grumeaux de sang pourri, et d'une odeur, consistance et apparence tout-à-fait purulentes....Mort dans la nuit, à la fin du cinquième jour de l'expérience ...A l'ouverture du corps, peau, tissu cellulaire sous-cutané, et muscles offrant le même aspect qu'après l'asphyxie par défaut d'air, et ne paraissant même pas exempts d'inflammation ; conjonctive, pituitaire et membrane buccale rouges ou violettes et tapissées d'un mucus épais, très-abondans et insolite ; poumons poisseux légèrement phlogosés, avec quelques plaques, mais encore assez crépitans. Le ventricule gauche du cœur présentait plusieurs taches brunes ou espèces d'ecchymoses pénétrant même dans son tissu ; il était en outre d'une couleur de lie de vin qui contrastoit singulièrement avec la couleur naturelle que conservait le ventricule droit. Mais, en revanche, ce dernier était en partie rempli par une concrétion albumino-fibrineuse dure, d'un blanc jaunâtre comme de la graisse, très-homogene, sans distinction des molécules du liquide injecté, pesant deux gros et demi, presque libre partout, et seulement adhérente au ventricule par une surface de la largeur de l'ongle, inflammatoire et comme déchirée. Cette concrétion étendait des ramifications de même couleur et consistance dans l'artère pul-

contagion; yet even these symptoms, as well as those consequent on them, may afterwards be fairly accounted for, by the diminished vitality of the blood, which is exhibited in the signs of its unhealthy condition, which have been already stated to take place. For blood, thus unfitted for the purpose it was intended for in the animal œconomy, is not only incapable of supporting healthy functions, but must tend to disturb them. That part of it sent to the brain, therefore, instead of promoting nervous energy, rather tends to overwhelm it. The same may be said of all the other functions which depend

monaire et dans les veines cave supérieure, azygos, axillaire, et même jugulaire droite; elle avait probablement causé les battemens de cœur violens dont j'ai parlé. L'œsophage et l'estomac ont paru sains; mais la membrane muqueuse des intestins, et surtout du duodénum, du rectum, et un peu des intestins grêles était rouge-violette, enflammée principalement par rides longitudinales et par plaques irrégulières qui bigarraient même l'extérieur des intestins avant leur incision. D'ailleurs, cette inflammation était sans épaissement de tissu, sans ulcérations, et se rapprochait beaucoup de l'ecchymose ou de l'hémorrhagie. J'ai vu dans le duodénum plusieurs espèces d'ampoules béantes dont je faisais sortir beaucoup de sang sanieux par la pression de la veine mésentérique voisine.^a La membrane interne du rectum était encore plus affectée, et ses glandes muqueuses en étaient très-gonflées et apparentes. Cet intestin contenait des matières puriformes semblables à celles de la dernière déjection: les autres intestins contenaient des mucosités grises-blanchâtres, très-épaisses. Les glandes mésentériques étaient comme pénétrées de sang et tout-à-fait enflammées. La vésicule biliaire bigarrée extérieurement par des taches brunes et violettes, était remplie d'une bile noire, épaisse et filante comme de la poix fondue."—Vid. Journal de Physiologie: à Paris, 1822—Tome ii. p. 16.

^a See case and sectio Cadaveris, 1st part of my Pathological Observations, at 49th and following pages; and also the second case and dissection, from page 125 to 131.

on the nervous energy of the brain, which alike depend on the vitality of the blood itself. Hence, muscular power, respiration, circulation, and all the secretions and excretions, are liable to be impeded or disturbed, in proportion to changes from the natural and healthy condition of the blood, which indicate diminution of its vitality.

The animal functions are most strikingly affected by the diminution of nervous energy and vital influence which occurs in typhus Fever. Derangement of the animal functions from the same cause. Hence arise muscular inactivity, sighing, debility of the heart itself, and slow circulation; and hence, too, the duskiess and yellowness of the skin, petechiæ, brown striped tongue, green and black vomiting, venous congestion of the brain, and coma, as we shall find, when we come to consider those symptoms, more particularly.

When speaking of the *ratio symptomatum* in inflammatory Fevers, it appeared probable that Its effects on the circulation of the blood. the increased strength of the pulse was attributable to the stimulus of extraordinary cohesion in the blood; on the other hand, I believe, the diminished power of circulation, so obvious in adynamic Fevers, though mainly attributable to diminution of natural stimulus, is partly owing to the mephitic effects of the altered blood on the sanguiferous system in general, commencing from the heart itself, and extending through the whole course of the arteries. The universality of the diminished powers of the circulation through

the sanguiferous system, argues still further for its cause being in the blood, on account of the ubiquity of that fluid in the same system. Of the distinctness of the nature and symptoms in typhoid and inflammatory Fevers, I have already stated my opinion ; and, therefore, in the following remarks on the peculiar symptoms which have given so much of a pestilential character to our Fevers since 1822, I shall confine myself chiefly to the direct evidence which these afford, of their intimate connection with that morbid condition of the blood which has been described.

The peculiar symptoms of pestilential Fevers.

The peculiar symptoms of pestilential Fever just adverted to, are green and black vomiting, melænous, dysenteric, or ochre coloured fœces ; tympanitic distension of the abdomen ; turbid high coloured urine, without deposit, the *urina flammea* of authors ; the dark brown discoloured tongue, sometimes livid, sometimes striped, with dark red ; the dusky yellow skin ; dark large petechiæ, or vibices ; suffusion of the eyes ; purple colour on various parts of the head, trunk, and extremities ; and the termination of these appearances in gangrene ; the surface of the body clammy, and under the ordinary standard of temperature ; erysipelas phlegmonodea, and glandular swelling, both of which sometimes appear spontaneously, and sometimes are the effect of accidental pressure, or of the abstraction of blood by the lancet, or by leeches. The pulse quick, weak, and small, but improved by the position of the patient ; sudden metastases from

the surface of the body, or from the cavities, succeeded by paralysis, coma, delirium, convulsions, and other symptoms of effusion on the brain, if not by speedy dissolution.

The connection which generally subsists between all those symptoms, is evinced by their frequent alternation, as on former occasions I have stated; thus, the green and black vomiting often alternate, with melænous and alvine discharges, and both of these in other cases with petechiæ, and dusky yellow colour of the surface of the body, and also with similarly coloured suffusion of the eyes.* All of them, too, point to the morbid condition of the blood, as their common origin; but whilst debility, the consequence of diminished vitality in the circulating fluid, is common to all, the relative characteristics given them by the secreting organs particularly engaged, may assist to distinguish them. These organs generally are those of the digestive and biliary systems, organs which have been found always to suffer most in pestilential Fevers, owing probably to the blood in them being always surcharged with hydrocarbonous principles, and the tardy circulation in that system giving it a greater predisposition to be affected by the diminished vitality of the circulating mass. The impeded function of the liver,

The connection that subsists between those symptoms.

The part engaged indicated by characteristic symptoms.

* See my Report from the Fever Hospital and House of Recovery, Cork-street, Dublin, for the years 1820-21. Case ii. at 23 and following pages.

and the want of a due separation of bile from the venous blood, carried to it, give rise to many of the symptoms enumerated, such are jaundice, the dusky colour, and dark maculæ on the surface; diminished temperature from interruption to those organic affinities in sanguification, both in the liver and lungs, on which, probably, animal temperature mainly depends. In the same way, many other symptoms may, I think, be accounted for, still, however, keeping in view the function particularly engaged in the morbid actions, and the unfit state of the blood for the support of these functions.

The failure of vital powers the consequence of the diminished vitality of the blood.

I must, for the present, defer entering more fully on the *ratio symptomatum* in pestilential Fevers; and having, I hope, made it sufficiently clear, that these symptoms are indicative of failure of the vital powers, and that failure is the consequence of diminished vitality in the blood itself, I shall next proceed to the *ratio medendi* founded on these principles.

RATIO MEDENDI.

The author's treatment founded on the principles laid down

The principles on which my practice in the various forms of Fever is founded, having been stated in my former publications, and in the former part of this Essay, and the peculiar mode of treatment adapted to each, having also been detailed in the cases given as specimens; it would now be superfluous to re-enter on these principles, further, than that

typhoid or adynamic Fevers are in their nature opposite to inflammatory Fevers, and therefore require totally opposite treatment ; that these states of diseased action, though so distinct in their nature, may, however, co-exist, supervene, or materially supersede each other ;* that the distinct modes of practice pursued in the simple forms of these relative Fevers require the utmost caution in the adjustment, for the relief of cases complicated of both ; and that whilst they are to be deemed antagonists to each other, they must be treated according to the paramount urgency of the relative symptoms, whether these indicate debility or inflammation. These remarks appear to me to be a fit introduction to the remedies for typhus Fever, or at least to such as are to be employed in those cases, where its symptoms have a decided ascendancy in the course of diseased actions.

In order to show the peculiarities of our epidemics during the last twenty years, I have already compared them with those at former periods in this country, and with those of the same period in the sister kingdoms, and with a similar view, it would be instructive to examine the works of Clutterbuck, Armstrong, and Bateman, to compare their descriptions of Fever, and the mode of treatment, which appeared in their several publications, dated ten

Peculiarities
of our epidemics
compared with
former periods.

* See the Experiments of Magendie and Gaspard, already referred to.

or fifteen years ago, with those published by others within the last year; more particularly as regards the distinctness of inflammatory and typhoid Fevers, and the caution required in employing remedies, especially blood-letting, so necessary in the former but so questionable when cases partake of the nature of the latter. But I must confine this comparison to the two following extracts, the one from Dr. Bateman's Succinct Account of the Contagious Fever of this Country, published in London, A.D. 1818; the other from a Practical Treatise on Typhus or Adynamic Fever, by John Burne, M. D., published in London, A. D. 1828; extracts, which I am the more desirous to contrast, as they refer to the first stages of typhoid Fevers, and when symptoms not being sufficiently developed, the difficulty of deciding on their appropriate treatment, is so much greater.

Dr. Bateman,
in 1818, recom-
mended blood-
letting.

“ The other active remedy (says Dr. Bateman) which I have mentioned, capable of abridging the course of Fever, if employed early, is blood-letting. I believe there are few physicians, who, like myself, commenced their professional career, impressed with the doctrines that prevailed in the schools at the close of the past century, in which the terror of debility was certainly predominant, who will not acknowledge that their subsequent practice has been a continued struggle between the prejudices of education, and the staring

conviction of opposing facts, which are continually forcing themselves upon their observation; and that they have more especially been compelled to a gradual, but material change in their views respecting the use of the lancet, not only in Fever, but other diseases * * * *."

"Few opportunities occur among the patients of the House of Recovery, of employing this remedy before the sixth day; but several patients have been bled previous to their admission; in all of whom, the headache had been removed, or greatly relieved by the venesection; and though the Fever could not be said to be cut short at once, it was always abridged in its duration, and exhibited no unfavourable symptoms during its course. One patient, a girl, whom I directed to be bled after the sixth day, having a very acute headache, exclaimed, at my visit on the following morning, that she 'had not had an ache or a pain since the bleeding.' Of the benefit of small blood-lettings, at a late period, I shall have occasion to speak presently* * * *."

From his experience of the utility of that remedy, when employed early in Fever;

"The power of this remedy, at this period of the Fever, cannot, I think, be questioned by those who have witnessed its effects; but, in such cases, it is important to ascertain the circumstances under which it may be necessary to employ it.* * * It seems to me, however, that if on the third or fourth day the headache is acute, or if, without severe headache, there is

And, further, that the power of it is not to be questioned, if, on the 3d or 4th day, there be much watchfulness, hurry of thought, &c.—and pulse from 100 to 120.

much watchfulness, a hurry of thought, and rapidity of speech, and an unusual sensibility of light, especially if the pulse be 100 or 120 ; such symptoms mark a condition of the sensorium, bordering on inflammatory action ; and that blood-letting is the most prompt and effectual mode of anticipating the morbid changes which are likely to follow, and which sometimes come on so suddenly, as to inflict an irremediable injury on that delicate organ, the brain.”*

Dr. Burne, on the other hand, speaking of the spontaneous developement of the Fever of 1828, continues :

Dr. Burne, in 1828, on the other hand, argues, that injury not easy to repair may attend on blood-letting ;

“ Although the judgment here wants the assistance of experience, the very great and unaccountable debility and listlessness, with the other signs, indicate very evidently the threatening of an attack of Fever. It is of much importance for the physician to see his way clearly ; for if he should attribute this obstinate attack to any other than its just cause, and be induced to abstract blood, he will inflict an injury it is not always easy to repair. The abstraction of blood does no good ; and it will now and then be succeeded by a gradual alarming sinking of the powers of life, from which the patient may never recover.

* See a succinct account of the contagious Fever of this country, by Thomas Bateman, M. D. F.L.S. &c. *London*, 1818, pages 98, 99, 100, 101.

“Blood-letting will not remove the symptoms, and, therefore, should not be employed : and, should blood be abstracted, and other means fail in arresting the formation of the Fever, the patient will be deprived of the strength he would require to bear up against a disease which * * will run its course. Should the pain in the head be so severe (it rarely is) as to tempt the practitioner to draw blood, let the quantity be small, and its effects be observed some hours after it has been abstracted, because patients will appear to bear bleeding at the moment, while, in a few hours, its injurious effects will be manifest.”*

It will not remove the symptoms, whilst it deprives of the strength requisite to bear up against a protracted disease.

The total discrepancy respecting the nature and treatment of epidemic Fevers, which appeared from the preceding extracts between the doctrines promulgated in England in 1818 and 1828, is more remarkable on account of the proximity of these periods to one another ; for, that there should have been an epidemical constitution of such an inflammatory tendency, at remote times, as to justify the opinions of these times, that even the accompanying petechiæ depended on inflammation, is not so surprising to any one, at all acquainted with the subject, as it must be, that the ingenious and able author of “ A Succinct Account of Fever, as it appeared in England within the last nine

Inference to be drawn from this discrepancy of doctrine.

* See a Practical Treatise on the Typhus or Adynamic Fever, by John Aurne, M.D. &c. &c. London, 1828, page 200-1.

or ten years," should have deemed it so decidedly inflammatory, that bleeding was generally applicable as a remedy in its commencement; whilst the equally ingenious and observing author of the "Practical Treatise on Fever," is found in so few years afterwards to support principles and practice nearly opposite, with respect to the epidemic Fevers of these countries.

This discrepancy not accounted for, further than that it might have arisen from the changes which have occurred in the epidemics themselves.

I do not, however, refer to this discrepancy of opinion, in order to account for it; but, leaving to the reader's judgment to decide, whether that discrepancy, arose from an actual change in the nature of Fever, or from the different views taken of it, I wish to point his attention to the arguments afforded thus in favour of those doctrines, of the distinctness of inflammatory and typhoid Fevers, which I have uniformly maintained, as may be seen in any of my publications on that subject, during twenty-five years; as well as their application to the consideration of the nature and treatment of our epidemics. The views taken, both of the nature and treatment of Fever, by Dr. Burne, entirely accord with those which may be found stated in my medical reports from the Fever Hospital, as well as in my separate Essays on that subject. And as (when speaking of his denomination of Fever) I have already remarked, this leaves, I think, no reasonable doubt of the epidemic Fevers of London, having lately become more typhoid or adynamic, than they had formerly been. It is further satisfactory to me to find,

that the treatment which I had long since adopted and recommended in our typhoid Fevers, has been found suitable to the prevention and cure of those in London; and that, too, in proportion as they have acquired more of that form, with which I was best acquainted.

The first principles of my practice thus appearing to be as generally received as they had before been rejected, it only remains for me to detail the remedies which I have employed; and with respect to these, too, I might be even more brief, from having little to add to the list of remedies in typhoid Fevers, which may be found at the 18th page of my "Treatise on Fever," published in London, A.D. 1814, as well as in my "Medical Reports from the Cork-street Hospital;" but, that as these publications may not be in the hands of the reader, some recapitulation of those remedies themselves; and my reasons for recommending them, supported as I have been by all my subsequent experience, may be permitted. They may be arranged according to their relative importance in the treatment of Fever, in the following order, viz.

The practical principles being now as generally acknowledged as before objected to, the remedies may be next detailed.

IN MIXED FEVER.

Cleanliness.
Ventilation.
Cool Regimen.
Plentiful Dilution.
Purgatives.
Topical Bleeding.
Antimonial, or
James's Powder.

IN TYPHOID FEVER.

Yeast or Barm.
Wine.
Aperients.
Emetics.
Blisters.
Tepid, or Cold Affusion.
Peruvian Bark.

Other remedies sometimes, but these most generally, applicable.

Many other remedies may, no doubt, be occasionally employed with advantage for the relief of the symptoms which accompany peculiar forms of epidemics, or such as are produced by extraordinary idiosyncrasies. But these, according to my experience are more frequently applicable than any others, in the treatment of our common indigenous Fever.

The beneficial effects of the four first remedies in the list, generally admitted.

Of the beneficial effects of the four first articles of this list of remedies in the treatment of Fever, it is no longer necessary to insist on, for they are no longer denied. For the same reasons, too, I need not, as on former occasions, enter more fully into explanation, why blood-letting has not a place in this list. When, however, I come to speak of topical bleeding, I shall have to state, that under the pestilential form which our epidemic Fevers have assumed since the year 1823, I have found it advisable to employ even this partial evacuation more sparingly and cautiously than in my first publications on Fever, I felt justified in recommending.

Why Peruvian bark appears in this, and not in former lists.

With respect to Peruvian bark too, which I have here added to the list of remedies for typhoid Fevers; although, on former occasions, I stated, that "I had not found it necessary for the cure of the continued Fevers in Dublin," I have now to observe, that, under the growing malignity of these distempers, I have employed some preparations, especially the sulphate

of quina, with obvious advantage, even in cases which did not partake of tendencies to remittent or intermittent forms; in such tendencies, however, the usefulness of that remedy was most manifest.

PURGATIVES.

The indications for the employment of purgative medicines, are generally so manifest from the commencement to the conclusion of febrile diseases, that they have been very generally employed; but the testimony of the experienced and skilful, in favour of this remedy, has sometimes, I fear, been solely relied on by those who employ it more promiscuously, and less discriminately. My own opinion respecting these remedies, from finding constipation of the bowels so frequently to precede or attend an attack of Fever, has long been, that that symptom should always be first relieved before any active remedy should be directed to any other; and, accordingly, both in hospital and private practice, I always attempted to effect due freedom of the bowels by purgatives, varied, according to the urgency of the case, previously to any other remedy. In a very large proportion of cases, indeed, the necessity of other means is thereby totally superseded. The form of purgatives which I employ are partly set forth in the cases detailed in this Essay, and still more fully in the cases given to illustrate my practice, in my first Treatise on Fever. As, on former occasions

The indications for employing purgative medicines, very general in Fever.

The forms to be preferred.

Limits to their employment. sions, however, I deem it right here to state,

that there are limits which it is of great importance to have well defined, in the use of a remedy of such general adoption ; for, I am fully persuaded, that if, besides the removal of the accumulated and noxious contents of the *primæ viæ*, and the prevention of costiveness, purgatives were employed perseveringly, and increased with a view to the cure of general Fever, as bleeding might be in an inflammatory disease, not only disappointment generally, but irreparable injury sometimes, would be the result. This, indeed, appeared to have been the opinion of Dr. Hamilton, whose judicious observations on purgative medicines contributed so much to their general employment in febrile diseases. The following extracts from his works, written at a time, when the epidemics of Scotland had not assumed the same degree of typhoid character, which they had even then acquired in this country, should not, I think, be omitted on any occasion like the present.

Dr. Hamilton's
opinion on this
subject.

“ The object to be attained (he says) is the complete and regular evacuation of the offensive feculent matter collected in the bowels in the course of Fever ; within this limit, the practice is safe and salutary. Of this, I am assured, that I have had much satisfaction in the prosecution of it ; and have not in a single instance had occasion to regret any urgency or bad consequence proceeding from it ; for I am not an advocate for its being carried to the

length of exciting universal secretion into the cavity of the intestines, or of procuring copious watery stools; such, indeed, while they are not requisite, might increase the debility so much and so justly dreaded.”

When speaking of the efficacy of purgatives in general, I have always deemed it right to mention the decided advantages which enemata, particularly those composed of turpentine and castor oil have, in cases of retention or suppression of urine, or of obstinate vomiting—symptoms which they seem to relieve, by removing impacted fœces from the large intestines, and by fomenting the parts in the neighbourhood of the kidneys, bladder, and their appendages. Fifteen years ago, owing to my frequent employment of this remedy, I was enabled to state, that the catheter had been seldom found necessary in any instance under my care, during the preceding eight years; and, that though, in two or three cases, distressing symptoms from retention of urine, were so urgent on the patient’s admission, that I directed the operation; yet, the use of such an enema, assisted by fomentation to the hypogastrium, rendered the operation unnecessary, before the arrival of the Surgeon. A statement which my subsequent experience has completely corroborated. The less frequent occasion for the catheter, appears to me to be partly owing to another circumstance, which will be stated under the head of topical bleeding; and whe-

The efficacy of enemata, especially when composed of oil and turpentine, for the relief of symptoms of a distressing nature; often superseding the necessity of the catheter.

ther we regard the danger of the symptom itself, or the pain or distress, particularly with females, which is inevitably inflicted by the introduction of the catheter, every other remedy must be considered as important, which has been found successful for its prevention or cure.

TOPICAL BLEEDING.

Topical bleeding not so frequently beneficial as it had been before epidemics assumed a pestilential character;

Although topical bleeding is a remedy of paramount importance, in those tendencies to unequal distribution of blood in the system, which sometimes occur when typhoid and inflammatory Fevers are combined, as well as indeed also for those local inflammations which so frequently succeed the partial turgidity of blood-vessels which then takes place; yet, I feel it my duty on an occasion like the present, to state, that for several years past, but particularly since our epidemics have assumed so pestilential a character, local abstraction of blood has not appeared to me so frequently applicable for the relief of the symptoms, as it had previously been. With respect to the opening of the temporal artery in particular, I would further observe, that of late I have seldom or never employed it in typhoid Fevers, either in hospital or private practice; having been induced to lay it aside, from perceiving, that the symptoms of general debility increased in urgency after its employment; and also, that dark erysipelatous inflammation of the surrounding parts, or aneurismal enlargement of

The opening of the temporal artery has been often succeeded by erysipelas and aneurismal enlargement of that branch of the artery which had been wounded.

the artery itself, often succeeded the wound inflicted. The symptoms of general debility that appear to me to be most remarkably connected with loss of arterial blood in typhoid Fevers, are involuntary stools, and the urine passed unconsciously ; and in other cases, retention or suppression of these discharges, both arising from the same paralysis of the parts engaged. To the omission of arteriotomy, therefore, I in a great measure attribute the circumstance of the catheter being so rarely necessary in my treatment of typhoid Fevers ; a fact, which I now deem it the more necessary to dwell on, from having formerly stated that in the Fevers I had previously met with, I had witnessed frequent benefit from opening the temporal artery for the relief of symptoms of unequal distribution of blood, and which I illustrated with cases detailed, with that view.*

To its omission the less frequent occasion for the catheter is, perhaps, attributable.

For the relief of the symptoms of unequal distribution of blood in typhoid Fevers, affecting the brain or other organs of less importance to life, I find leeches applied as near as possible to the part engaged, to afford very general relief, particularly when assisted by the removal of such obstructions to the equal distribution of blood, as the accumulation of impacted fœces in the intestinal canal, or the congestion of dark venous blood in the hepatic

Efficacy of applying leeches near the organs affected, aided by the removal of any obstructions that may operate against the equal distribution of blood.

* See my Treatise on Fever, 28th to 42d page.—*Edit. London, 1814.*

and mesenteric vessels. When the head is particularly engaged, cold ablution of it, and warm fomentation of the feet, greatly assist the efficacy of leeches to the temples; but for some years' past, finding the congestion of blood in the hepatic and mesenteric systems so frequent an occurrence in Typhoid Fevers, and so often by metastasis to other parts, to be the cause, of serous and sanguineous effusions I have of late years, in many cases, applied leeches to the verge of the anus; and of their efficacy in that way, I can report most favourably. Of this, remedy, and its *modus operandi*, I shall again have an opportunity of speaking, under the head of the treatment of the sequelæ of Fever, especially of dropsy.

Leeches applied to the verge of the anus, also found to be efficacious.

ANTIMONIAL POWDERS.

The preparations of antimony, especially James's powder and tartar emetic, again recommended.

Subsequent experience, which induced me to limit the employment of arteriotomy, has led me to adopt a freer use of the various preparations of antimony, especially of tartar emetic and James's Powder, than even I had ventured to recommend in my first report on Fever. In delirium, and other symptoms of derangement in the sensorial functions, connected with determination of blood to the head, or turgescence, the solution of tartarised antimony given, so as to excite nausea, is, in my opinion, one of the most effectual remedies. In mixed cases of Fever, particularly where any doubt remains of the safety of bleeding, for the

relief of the inflammatory affection, then, too, this remedy is chiefly to be relied upon in whatever part that affection exists, whether head, thorax, or abdomen.

With respect to James's Powder, I have to repeat the same remarks upon its effects, in cases of effusion into the head, which I made in the First No. of the Dublin Medical and Physical Essays, published, January 15, 1807. Both at the commencement of mixed cases of Fever, in which evacuants have been employed, as far as the warning symptoms of debility admit of; and in advanced stages of slow Fevers, when, as sometimes happens, inflammatory action of the vessels of some part has been kindled, and indicated by a parched skin and quick pulse, there is, perhaps, no remedy superior to it in efficacy.

James's powders to be used in Fever having a tendency to effusion of the head, &c.

On finding that "James's powder," reduced the pulse both in frequency and hardness, diminished febrile anxiety, and consequently induced sleep, without exciting any adequate discharge, I proposed the following rationale, with respect to its *modus operandi*, and again freely submit it for the reader's consideration. The first sensible effect of this powder on the human system, is nausea, proportioned to the dose, producing, during its continuance, a diminution of the frequency of the pulse, and of the determination of blood to the head, (marked by the comparative paleness of

Rationale of the agency of James's powders in Fever.

the face;) to which general relaxation of the surface succeeds, affecting the extreme vessels, exhalent and absorbent, and tending to that equable action by the excretory and secretory vessels, which is generally followed by a return of the natural evacuation. By such effects, the

In preventing
local congesti-
on or inflamma-
tion.

disposition to partial accumulation of blood, on which local inflammation in the course of Fever, probably depends, must be considerably counteracted; and by the increased action of the absorbents, which succeeds their relaxation, the return of the morbid accumulation is further prevented. The direct influence which all impressions made upon the stomach, has upon the nervous, sanguiferous, and absorbent systems, affords a rational explanation of their agency in the *modus operandi*, which is thus attempted with respect to antimonial medicines. The dose which I have latterly ad-

The dose to
be increased in
mania or deliri-
um, or substi-
tuted by tartar
emetic.

ministered, is the same which I recommended from the beginning of my observations on its use in Fevers, viz. three grains three times a day; but in cases of violent delirium, or tendency to mania, the stomach being generally very torpid, it will bear eight or ten times the ordinary quantity. In such states, however, solutions of tartar emetic may often be advantageously substituted.

Found to pro-
mote crises, if
timely adminis-
tered.

In those forms of Fever, in which the efforts of nature towards recovery can be observed on critical days, I still find, that these natural efforts are greatly promoted by administering an

increased dose of James's powders, at the hour of rest; and the result of the struggle for recovery becomes more decided and favourable than when they had not been employed. I am the more desirous to repeat my testimony in favour of James's Powder, in the cure of Fevers, because, since first promulgated, it has met with some opposition from theorists; whilst on the other hand, its adoption in the treatment of febrile diseases, has had the support of the most experienced, both in their practice and writings.

BARM OR YEAST.

My experience in the employment of this remedy in typhus Fever having been, I believe, as great as that of any other individual with any other remedy, it is my privilege and my duty to state, that during fifteen years, which have past since I gave my evidence in its favour, in a treatise published at that time, I have never ceased to prescribe it, both in hospital and private practice; and that I never have had reason to regret it, or to retract from my former statement of its utility; but, on the contrary, that statement has been confirmed by every succeeding trial, more especially since the rise of those pestilential Fevers which have prevailed in this country during the last five or six years. I have administered it in cases where purple extremities or gangrenous sloughing took place, accompanied by symptoms of inflammation, when Peruvian bark could not be

The author's very extensive experience with this remedy, is a sufficient reason for his unqualified recommendation of it.

given with advantage ; and also, when these pestilential characteristics occurred, without inflammation of any important part ; and under such circumstances, it appeared to me to assist efficacy of the bark in arresting these putrid symptoms.

His evidence in favour of this remedy having been early recognised in popular systems, but not for some time past, may, perhaps, justify a recapitulation of it.

As my evidence in favour of barm or yeast in typhoid Fevers, had been recognised in most of the best and most popular digests on the practice of physic, which were published soon after my first treatise on Fever, appeared ; but have not been so lately ; I am further called on to dwell on the result of my trials of this remedy during the long period of nearly thirty years ; and the more especially, as in some of those popular digests lately published, it has been regretted, that this remedy has not had a fuller trial. It may, however, suffice for the present to remark, that during the period just mentioned, I think I must have employed it in nearly 10,000 cases ; both in the manner prescribed in those specimens of typhoid Fever, given on this occasion ; and also in the form of enemata, where the irritability of the stomach, attended by dark or green vomiting, precluded its employment. The result of this experience is my full conviction, that barm or yeast is well suited to every stage of typhus Fever, in which it can be borne by the stomach : that in Fever, it is, in general, easily taken alone, or with any medicine or vehicle that may be deemed advisable to join with it ; but that in the worst

It is seldom rejected by a patient in bad Fevers, but, on the contrary, is often relished.

forms of typhus Fever, when it is most needed, it not only is seldom rejected by the stomach, when any other medicine could be retained, but that the patient, in such cases, often expresses a liking for it ; a fact, which may possibly surprise those who judge from the nauseous and bitter taste of barm, to a healthy person ; but it is to be recollected, how often the taste is inverted with patients in Fever : thus, for example, he who had been a water-drinker, will then prefer wine ; and very often, on the other hand, habitual wine-drinkers will, in high degrees of Fever, greatly prefer water to their habitual beverage.

Barm or yeast, is moderately laxative ; often superseding repeated doses of purgatives ; if not sufficiently so, I sometimes combine tincture of jalap with it ; but, in other cases, if the bowels are too free, a few drops of tincture of opium are added to the dose. Thus administered, it appears to me to correct the morbid contents of the alimentary canal, and consequently the symptoms of putrescence ; petechiæ, and black loaded tongue, will be found, I think, more effectually remedied by it than any other drug : accordingly, as already intimated, I have often substituted it for bark and wine, when these remedies could not be employed, on account of the complication of inflammatory symptoms, and I have conjoined it with these remedies, when there was no such counter-indication.

The general effects of it ; and it may be sometimes very advantageously substituted instead of bark.

The dose, and mode of exhibition.

The dose, which I still continue to administer, is two table-spoonfuls, repeated every third hour; and I generally direct it with equal quantities of camphor mixture. If administered by enema, three times the quantity, given by the stomach, may be injected. And here, I should not omit to meet an objection to the employment of barm in Fevers, which has been made by persons, whose opinions I respect, "that it would be likely, by promoting fermentation, to increase the tendency to tympanitic distention, that is sometimes so obstinate a symptom in typhoid Fevers." The result of my trials, however, has been the very contrary to what has been thus apprehended; for, in some of the most obstinate cases of tympany, that I have met with in typhoid Fevers, enemata of barm, and assafætida have proved the most efficacious remedies.

WINE.

Caution necessary in prescribing wine in Fever, by one who opposes the doctrine of typhoid Fever being of a phlegmasial character.

With respect to the use of wine in Fevers, I have always found it necessary to speak with more reserve than, perhaps, would seem to others, considering my experience, to be called for. Having always resisted the opinion of those who ranked typhoid Fevers amongst the phlegmasia, they might take it for granted that I arranged myself with the Brunonians, and prescribed stimulants, but particularly wine, with the same freedom that I had opposed the indiscriminate employment of blood-letting, as a remedy in the treatment of continued Fever.

And, in order to show that this inference would be unjust, as far as regarded my principles and practice, which are unchanged, I shall only repeat what I have written on this subject in 1814, when there had been already considerable check given to the superfluous use of wine in Fevers.

“Some estimate of the great difference of opinion which prevailed in the writings of the most respectable medical authors, on the utility of wine in Fever, may be formed by reading the general review taken of them in Dr. Wilson Philip’s learned Treatise on Febrile Diseases; this contrariety appears to have been produced by the too indiscriminate trials that have been made with wine, as a general remedy in Fever; some having witnessed its injurious effects, when given untimely, or too abundantly, others, the benefit derived from the judicious administration of it.”

Difference of opinion on the use of wine in Fevers, seen in Doctor Philip’s work.

“Wine given early, even in the contagious Fevers of this country, seems often to be directly injurious, by exciting the already too violent action of the vascular system, and indirectly so by exhausting constitutional excitability; thus making a greater quantity of it, or other stimulants necessary, than the stomach can generally bear in the latter stages of Fever, and when the debility which succeeds in the progress of the disease may make it necessary.”

Wine, given indiscriminately in the early stages of Fever, often injurious.

In complicated cases, wine may be beneficially substituted by ammoniated solution or by a mixture of barm and camphorated julap.

“ In those combinations of typhus Fever with other diseases of a contrary nature, and in which wine is found hurtful, it should not be directed till such complaints are checked, unless extreme debility becomes the paramount consideration; and in cases of this kind the ammoniated solution,* or a mixture of barm with camphorated julap, may often be advantageously substituted for vinous or spirituous mixtures.

Wine rarely ordered in cases terminating before the tenth day.

“ Wine is rarely directed in the Hospital in any of the cases which terminate before the tenth day, and these constitute the largest proportion, and the quantity given in the more protracted forms, has been gradually lessening since the opening of the Hospital.

“ On inspecting the diet tables, where the wine ordered daily has been entered, I find that I have not directed it in more than half as many cases, in proportion to those committed to my care in the latter years as in the former; and that even in those cases, in which I did prescribe it, the quantity has seldom exceeded one-half of what I formerly deemed necessary.

“ It should be stated, however, that the Fever received into the wards in the three first

* “ See formulary in the Appendix .”

years of the Institution, were then generally of a more typhoid type than afterwards; admission being for some time necessarily limited to patients coming from that quarter of Dublin, where an account of the density and poverty of its population, a malignant contagion first sprung up, and prevailed in an extraordinary degree, until it received an efficient check from the preventive system, connected with the Cork-street Institution.”*

Such were my observations in 1814; and, which as well as the rules quoted on the same occasion, from Dr. Philip's Treatise on Fever, for directing the quantity of wine to be employed, I am still disposed to recommend.† The peculiar malignity, however, of typhoid Fevers, within the last five or six years, has led me to employ wine more frequently, and in some instances earlier than I had done in preceding years; and though I am aware how precarious it is to generalise on this vital question, I think

Dr. Philip's general rules recommended.

* See my Treatise on Fever, &c. &c., page 45-47, 48.—Edit. London, 1814.

† See Philip on Febrile Disease, page 285. By comparing his rules, for ascertaining the quantity of wine in Fever, published in 1814, with those which Dr. Philips wrote in his edition, 1803, it may be seen how much opinions on that subject had changed within ten years; another revolution in the character of our Fevers, since 1823, will probably bring the employment of wine more into general use, than it has latterly been; this at least I find to be the case with respect to my own practice; for though I have not administered that remedy, as appears from inspection of my diet tables, so frequently or so largely as during the first years after the opening of the Hospital, yet in some cases I have given small quantities at earlier periods.

I may state from my experience, that small quantities of wine, diluted with water, according to circumstances may be often given advantageously, even at the commencement of malignant Fevers, of a decidedly typhoid character. In

In cases decidedly typhoid, especially when they have been produced by contagion, the early administration of wine is frequently advantageous;

most cases, therefore, of that kind, especially such as I can ascertain to have been produced by contagion, I have prescribed from the commencement, from two to four ounces of wine, diluted with water; this to be given in divided portions, in the course of twenty-four hours; commencing from the time the patient was placed under my care; but the quantity and the time to be regulated by its effects; *e. g.* if found to excite distress, the interval between each dose to be increased, and the succeeding dose to be diminished; and *mutatis mutandis*, to administer it more frequently, and in larger doses, according to the urgency of circumstances.

But need not preclude or interfere with necessary evacuations.

Wine thus administered, need not interfere with such evacuations, as are deemed necessary in typhoid Fevers. The due evacuation of the bowels should be attended to at the same time; and in mixed cases of Fever, where the urgency of symptoms of inflammation, local or general, demands local or general blood-letting, I often find the cordial support of wine to promote the beneficial effects of such evacuation, and to counteract the consequences that would otherwise succeed.

It is of the first importance, however, in determining on the early employment of wine in

Fevers, to ascertain whether they are or not decidedly of a typhoid character ; and this is so difficult, during the first three or four days from the attack, that I have rarely ventured even on the small quantity just mentioned, excepting in cases attended with positive signs of debility, or such as I know to be the consequence of exposure to contagion. In such cases, indeed, I have found it highly beneficial, in relieving headache, tendency to delirium, restlessness, and even other symptoms, which, under other circumstances, I would have deemed counter-indications of wine.

This was remarkable in the case of Mrs. Case of Mrs. Bridges, where-
in the early use
of wine was ve-
ry beneficial. Bridges, our excellent head-nurse, who, in the month of September, in the year 1828, had an attack of typhus Fever, which commenced in the same manner, and promised to go the same course with one in which I had attended her some years before. After the usual rigor, on the evening of the day on which she was attacked, she passed a restless night, with much palpitation at her heart, confusion of thought, and sickness, and oppression at stomach. On the succeeding morning, when I was called in to visit her, her countenance was anxious, her voice feeble and plaintive, and she felt great debility ; the eyes were slightly suffused ; some headache ; skin was clammy ; tongue striped with brown ; pulses somewhat irregular, and accompanied with palpitation of the heart ; belly costive ; thirst moderate ; constant nausea, with oppression at stomach.

Prescribed—An emetic ; and a blue pill, combined with assafœtida, to be taken, and if necessary, two hours afterwards a saline aperient draught, and purgative enemata, to open the bowels ; the feet to be fomented twice a day ;

barley water, and light two-milk whey for drink.

On the next day, she had passed a restless night, though the emetic had operated quickly, and the purgatives had freed her bowels well; the last of what was thrown up from the stomach, was green, and the stools were dark and offensive; urine scanty and crude; slight delirium in the night; continued anxious, and complained much of debility, had a feeble voice; pulse 120, somewhat irregular; requested to have a little wine.

Prescribed—Six ounces of wine to be given, diluted with water, in the course of the day and night; an ounce of camphorated mixture every fourth hour; an enema with barm in the evening, if necessary; the drinks to be still barley-water, and two-milk whey.

On the succeeding day, she stated she had some rest; that she relished the wine much, and wished for more of it; she found her head much relieved every time she took it.

Prescribed—Let her have eight ounces of wine. Continue the other remedies as yesterday.

Convalescence commenced and recovery effected sooner than in the previous attack.

Under this treatment, recovery was progressive; and on the eighth day from the commencement of the attack, she was convalescent; but it was many days before she was able to resume her duties. The course of her illness and convalescence, did not, however, occupy so much time as her actual sickness, before convalescence, did in the former attack, in which I deferred giving wine to a late stage of the Fever.

It is unnecessary to insist here on the bene-

fits of wine, under experienced guidance, in the middle and latter stages of Fever, as on those points most practitioners are agreed. I would, however, remark, that in some cases of protracted Fever, where severe affections of the head arise, which mark a great determination of blood to that organ, or even a tendency to effusion within the cranium, it is sometimes advisable to try how far the debility which predisposes to such states, may be relieved by the cautious administration of wine; for in such cases I have sometimes found it highly beneficial; but of which I can only afford room for the following example. It is the case of Mr. Lawless, our resident Accoucher and Assistant-Apothecary, whom I was called on to attend, in consultation with Doctors O'Brien and Harkan, on the 28th of January, 1828.

This illness commenced on the 16th of that month, and during its continuance, the head was much engaged, requiring, besides other means, local abstraction of blood, and blisters. On the first day of our consultation, the skin was marbled with petechiæ, and clammy; the eyes suffused; countenance anxious when roused; and he seemed to require a mental exertion, in order to speak coherently. Much subsultus tendinum; stools dark and offensive.—Pulse 120, easily excited. There had been a considerable tendency to evening exacerbations. Tongue striped and red; swallowed well, and drank when liquids were offered to him; but did not express thirst. To us present the Fever appeared a striking example of the *Fièvre Ataxique* of the French school; and it was determined to make a cautious trial of a little claret

Exemplified
by the case of
Mr. Lawless.

diluted, in addition to the other remedies previously in use—more especially as he expressed a wish for it; the quantity, however, was to be determined by the first small portion tried. The whole case and the result, however, are summed up in the following letter, and with respect to the use of wine, which is my leading object, is sufficiently full for the present occasion :

Cork-street Hospital, 4th Dec. 1828.

DEAR SIR—The day on which I was first attacked was the 16th of January, and on the 28th you met, in consultation, Drs. O'Brien and Harkan; when you ordered me four ounces of wine, two ounces of which only was given me. On the next day it was not thought advisable to give me more than that quantity, and on each succeeding day it was increased. I was so far convalescent, as to be able to go to the country on the 22d February.

The day of attack of my former Fever, which preceded it by a few months only, and in which wine was also useful, was the 30th August, 1827; in this I relapsed, and was convalescent in October.

I am, dear Sir,

Your very obedient Servant,

T. H. LAWLESS.

To W. Stoker, M. D. &c.

Wine should not be omitted in such cases of debility as are very protracted, even where local evacuants are indicated.

The impracticability of generalization, in laying down rules for the employment of remedies in Fever, is well known to the experienced; and, were it compatible with the scope of this essay, I would therefore prefer extending the number of cases, to making any further observations of a general nature. I can now only add to those by Dr. Philip, in his Treatise on Febrile Diseases, already adverted to,

that if, in protracted stages of Fever particularly, evacuations, even from the sanguiferous system itself, are indicated, for the relief of local obstruction or turgescence, the employment of such evacuations should not prevent the administration of wine, proportionate to the general debility that may co-exist—as it will often be found, that these remedies, though so opposite in their nature, and productive of such contrary effects in the commencement, will, towards the termination of protracted Fevers, materially assist each other, in promoting a favourable crisis, and ultimate and complete recovery.

EMETICS.

Subsequent experience has not changed my opinions with respect to the employment of emetics for the cure of continued Fever; and though I have little to add or retract from what I stated on that subject in my Treatise on Fever, published, 1814; yet, as I perceive, that in some recent publication, whilst the principles and practice of that treatise have been otherwise generally adopted, considerable differences exist with respect to emetics. I may be, therefore, allowed some recapitulation of what I have already published.

“ In the commencement of most Fevers, when nausea, and symptoms of congestion in the superior parts of the alimentary canal prevail, full vomiting is easily excited; and when

Subsequent experience has not changed the author's opinion. Why now recapitulated.

Gentle emetics generally useful in the beginning of Fevers.

effected by moderate means, seldom fails of being beneficial, if not in cutting short the Fever, at least in considerably palliating some of the most distressing symptoms which occur at that period ; amongst these symptoms, nausea, and oppression at stomach, are often the chief.

An infusion of chamomile often sufficient—more powerful means demand great caution.

For this purpose, two or three copious draughts of warm water, or tepid infusion of chamomile flowers, taken in quick succession, will generally be sufficient. Attempts, however, to proceed further than this, to force vomiting by more powerful ingredients, should be made with great caution ; for the agitation of the system in general, and of the chylopoietic viscera in particular, as the subsequent exhaustion, by the violent operation that may be produced by tartar emetic, or even by ipecacuanah itself, is often found to accelerate supervening debility ; or sometimes to cause such a preternatural increase of secreted fluid in the *primæ viæ*, as to induce a sense of oppression or pain at the epigastrium, or harassing retching, to such a degree, that medicine or drink cannot be retained ; and perhaps in this way too, inflammation of the internal coat of the stomach, may arise.

When, in general, vomiting is not easily excited, purgatives to evacuate the intestine.

“ When, therefore, the moderate means recommended here, fail to excite vomiting, it will in general be safest to trust to purgatives, for any further evacuation from the alimentary canal that may be deemed necessary, the operation of these being more conformable to nature, and more under controul.”

To these general rules, however, I would now make some exceptions in cases of typhoid Fevers, either produced by contagion, or the epidemic constitution of the air, if ushered in by well marked rigors, and nausea; for, if in such cases the patient had been previously healthy, I have found the exhibition of ipecacuanha, and if necessary, tartar emetic, administered during the rigor, not only safe, but in many instances effectual, in arresting the progress of disease.

Exceptions to the rules during rigors, after exposure to contagion.

“ The same observations apply to the exhibition of emetics at other periods, as well as at the commencement of continued Fevers; but when there are marked symptoms of torpor of the stomach, especially when those symptoms arise from the consent between the stomach and head, which is often found to take place in cases of delirium ferox, or in tendencies to mania, then very large doses of the strongest emetics are frequently administered without producing any considerable effect; but whether they do or not, they are found to be powerful means for the relief of delirium, or tendencies to mania in such cases.”*

In the torpor of the stomach, delirium, ferox, and mania, very strong emetics necessary.

At particular seasons, when the Fevers assume, as they did in the spring of last year, more or less of the intermittent or remittent character, and also when relapses are frequent, from the same cause as happened in 1826, when

Vomits applicable to the cure of intermittent tendencies.

* See my Report for the Fever Hospital, for 1820, 21, and 23.

they were more frequently the consequence of exposure of the debilitated and starving poor to malaria, than to contagion; then the utility of active vomits became more apparent, but more remarkably so, when administered soon after the incipient rigors, towards the close of the apyræxia, or immediately after a tendency to relapse was observed.

BLISTERS.

Blisters more generally useful in the beginning of Fever, than local bleeding, which has been most remarkable since 1823.

During the revolution which I have stated to have taken place in our epidemic constitution, of late years, I have found the observations I formerly made respecting the use of blisters in the treatment of continued Fever, less applicable to them than to almost any other remedy, *e.g.* I formerly stated, “that I rarely employed blisters in the early stages of Fever, from not deeming their stimulating effects necessary at these periods, and from finding the evacuation which they excite, more conveniently effected by means of local blood-letting; and that if blisters were applied during anxiety, restlessness, and increased sensibility, which so often attend nervous Fevers through a considerable part of their course, that they seemed generally to increase all these distressing symptoms.” But in my subsequent reports from the Fever Hospital, and in my Pathological Observations, published, 1823, I have stated, “that under the pestilential form that Fever then assumed, I found blisters more, and local bleed-

ing less frequently necessary than they had previously been;" and I can now add, that by substituting the former for the latter, even in the early stages of Fever, I have witnessed advantages very generally in the relief of headache, anxiety, and loss of rest; so much so, that wherever these symptoms have been attended with other decided characteristics of adynamic Fever, I have generally relied on a blister applied to the nape of the neck, close to the occiput, assisted by an embrocation to the head, previously shaved, and by warm fomentations to the feet, and it seldom failed to give relief. When, indeed, there is marked turgidity, violently increased action in the vessels of the head; then leeches, applied to the temples, and still more effectually inside the nostrils, proportioned to the urgency of those symptoms, should not be omitted; but the other remedies before mentioned will very often be found to render the leeches unnecessary.

Leeches to the temples or inside the nostrils.

The utility of blisters at every stage of Fever, when coma threatens, or supervenes, or when that symptom is not relieved by evacuants, can be no longer doubtful; for diminution of vital energy, on which coma often seems to depend, and is often connected with the diminution of the natural secretions, critical discharges, or of eruptions on the skin, points to blisters as most likely to afford relief. The constant excitement which blisters cause for some hours after their application, renders them advisable in progressive

Blisters useful in all stages of Fever, for the removal of coma, from suppression of discharges, &c.

states of insensibility, and their successive applications to different parts is often decidedly beneficial in such states ; which is most remarkable when they are employed after the alvine discharges, and urine are suppressed from partial paralysis of the organs engaged, or when these discharges are passed involuntarily : I have also supposed it probable, that the good effects of blisters, applied under such circumstances, are partly attributable to the absorption of the cantharides, which takes place, so that even the strangury which they excite, although itself sometimes a distressing symptom, is often connected with an improvement in the secretions previously impeded.

They should be applied near the part affected, but very often useful when otherwise applied.

Blisters should be applied as near as possible to the parts affected ; but from further experience, I feel called on to add, that their application also to parts remote from those of disease, appears to me of late, more generally useful, than I formerly supposed ; and, therefore, besides applying them to the head and neck, for the relief of affections of the brain, I have frequently directed them to be applied to various parts of the lower extremities, in cases attended with extreme debility, with decided advantage ; and on the same account, I have directed sinapisms much more frequently, both in hospital and private practice, than formerly appeared to me to be called for.

Of the utility of blisters, or stimulant em-

brocation, which I sometimes employ with the same view, applied near to the affected part, in complaints of the encephalon, trachea, œsophagus, pleura, or any other viscus, it is unnecessary to enter more fully; and with respect to the remarkable benefits observed to follow the application of blisters over the hepatic region in typhoid Fevers, when accompanied with a tendency to dropsical or purpur al effusion, and connected with disordered function, sometimes, perhaps, with diseased structure of the liver itself, I beg to refer the reader to the first part of my "Pathological Observations," from page 154, to page 175, inclusive, as I have nothing to add or retract from what is there stated; excepting that subsequent observation of those symptoms, which first led me to employ this remedy, has since confirmed my opinions of their nature and treatment, viz. that purpura, jaundice of the interstices, green vomiting, malænous stools, *urina flammea*, and the alternation of those symptoms by metastasis, are intimately connected with disordered function of the liver; and that the *modus operandi* of a blister applied to the right hypochondrium, may be explained, as a stimulant applied as directly as possible to the vessels of the diseased function, which thus interrupts their morbid action; secondly, the course of disease, being interrupted the inherent, vital, or corrective power of the function is less obstructed; and lastly, the inherent, or vital power being restored, a fitter pabulum for circulation, and

The utility of applying stimulants near the affected part; but more especially of blisters to the right hypochondrium.

its purposes is thus provided. The utility of frictions, whether mercurial, or merely stimulant, as well as of local blood-letting, for the relief of local turgidity, when applied to the right hypochondrium, may be relatively explained in the same manner.

TEPID OR COLD AFFUSION.

Aqueous affusion, as recommended by Dr. Currie.

As in my list of remedies for Fever, I have always, from my high respect for “Dr. Currie’s Medical Reports, on the effects of water, cold and warm, as a remedy in Fever, and other diseases,” given cold or tepid affusion a distinguished place, it is necessary, that on the present occasion I should not pass it over without

Failure of first trials in Hospital, owing to the tendency to organic diseases amongst the working classes

some remarks. With respect to the trials of this remedy, which I made with the most sanguine hopes of success, during the first years after the Fever Hospital, and House of Recovery in Cork-street were opened, I have already more than once stated, they failed so frequently as not to justify their repetition to any considerable extent; a circumstance which I attributed to the frequency of internal organic diseases, amongst the working classes of Dublin, as these diseases seemed often to be increased by the watery affusion, bad consequences, which did not follow in cases of private practice, where I had employed affusion with manifest benefit to the patient. But, with respect to this remedy of late years, as may be well supposed, from what has been already stated in this Essay, with regard to the great diminution of vital

power, and consequently of animal heat, which had taken place since the epidemic constitution has given so much of a pestilential character to our epidemic diseases, cold or tepid affusion has been seldom or never employed; indeed, it would have been contrary to the first principles laid down by Dr. Currie himself, to make a trial of this remedy under such circumstances.* “This remedy (said he) should never be used when any considerable sense of chilliness is present, even though the thermometer, applied to the trunk of the body, should indicate a degree of heat greater than usual.

Aqueous affusion not indicated since the diminution of vital power or temperature in Fever has become so very remarkable.

According with Doctor Currie's principles.

“Neither ought it to be used, when the heat, measured by the thermometer, is less than, or even only equal to the natural heat, though the patient should feel no degree of chilliness. This is sometimes the case towards the last stages of Fever, when the powers of life are too weak to sustain so powerful a stimulus.”

“It is also necessary to abstain from the use of this remedy, when the body is under profuse sensible perspiration; and this caution is more important, in proportion to the continuance of this perspiration.”

Indeed, cold and tepid affusion is counter-in-

* See Medical Reports on the effects of water, cold, and warm, as a remedy in Fever, and other diseases, applied to the surface of the body, or internally, by Dr. Currie, M.D., F.R.S., &c. vol. i. pages 18, 19, 20.

Illustrated by
his observation
in his own case.

icated, not only by the diminished temperature in Fever, produced by our epidemic constitution of late, but also by diminished vital power, or want of reaction in the system, (to use the term of Boerrhave, though liable, perhaps, to Dr. Currie's censure.) A change of circumstances in our epidemics now, compared with those in which Dr. Currie employed affusion of water with such decided success which may, I think, be well illustrated by his own case. The good effects of cold bathing on his young and vigorous limbs, when he arrived heated, but not fatigued, on the banks of the river Tweed, about 11 o'clock in the forenoon, being contrasted with the alarming consequences that succeeded a similar immersion in the same river in the evening, after he and his companion had travelled for some miles, and arrived at the end of their journey, stiffened and wearied by their exercise. In the spring and summer months, indeed, I still meet with cases of typhoid Fevers, in young and robust persons, where the temperature of the skin justifies the employment of cold or tepid affusion, but much seldomer than I am desirous of, either on my patients' own account, or the good opinion I entertain of the remedy.

• The following Table exhibits the names, ages, day of fever, and temperature of skin, in thirty-three cases in the month of December, 1828, distinguishing those who had, from those who had not petechiæ.—The temperature was taken by applying the thermometer under the tongue, and in general in the evening of the day of admission.

In considerations of the effects of cold affu- The inference
sion on patients affected with epidemic Fevers in favour of this
of this country, the results of the trials made remedy, from
what occurred
in tents.

NAMES.	Age	Day of fever	Pulse	Tempera- ture of Skin	OBSERVATIONS.
Elizabeth Hogg	20	21	120	95°	Synochus.
Patrick Stapleton	8	4	148	96°	{ Perspiration when the temperature was taken.
Mary Savage	18	16	96	93°	
John Ransford	24	8	120	100°	Perspiration.
Daniel Martin	11	4	146	96°	Temperature taken at 5 P. M.
Mary Nichols	30	6	98	95°	Convalescent on succeeding day.
John Tenant	16	9	136	105°	Convalescent on the day following.
William Tenant	17	11	112	101°	Petechiæ and delirium.
John Tenant	16	10	120	99°	Petechiæ and some coma.
William Tenant	17	12	128	103°	{ Tepid ablution used.—Convalescent on 13th day of Fever (2d trial.)
William Mahon	23	9	108	104°	
Bridget Lee	24	4	88	102°	Tepid ablution used.—Convalescent on 14th day of Fever (2d trial.)
William Redmond	40	6	108	102°	Convalescent on the day after.
John Baker	64	8	84*	92°	Ditto.
Mary Anne Kelly	27	9	106	98°	Ditto.
Margaret Briscoe	20	6	100	98°	This case is detailed in full.
John Matthews	26	8	85	97°	Convalescent on day following.
Mary Mahon	36	9	93	99°	Ditto.
Margaret Langley	23	5	100	99°	{ Convalescent two days after admis- sion.
Anne Mangan	30	6	98	99°	
Thomas Matthews	67	8	84	97°	Synochus.
Margaret M' Mahon	50	6	99	93°	Ditto.
Elizabeth Mangan	36	9	98	99°	Pneumonia Notha.
Mary Langley	40	9	100	96°	Synochus.
Mary Stanley	64	7	104	98°	Ditto.
Vina Leeson	27	7	88	97°	Ditto.
Denis Bryan	26	6	75	97°	Typhus.
Bridget Phillips	25	13	112	102°	Ditto.
Nurse Clinton	27	9	92	94°	Pneumonia—bled.
B. Philips (2d trial)	25	15	96	100°	Iritis Ptialism.
John Dowling	24	14	74	98°	Pneumonia (2d trial.)
John Healy	37	7	94	95°	Synochus.
Thomas Ward	24	8	110	88°	{ Petechiæ.—Bled; blood not buffed, but broken; headache not relieved by it.
Thomas Crotty	26	8	94	98°	
M. Byrne			104	92°	{ Hands purple; opisthotonos, trachea protruded.—Died.
† M. Blake	18	14	No	90°	

* The pulse in this case was very feeble.

† Died soon after admission.

in 1826, of the relative advantages, or disadvantages, to those placed in the tents at that time, should not be passed over unnoticed ; more especially, as these results, if considered abstractedly, might lead to very unjust conclusions, with respect to the applicability of exposure to cold and damp, in the treatment of epidemic Fevers. In comparing the relative mortality, or the duration of Fever in the tents, with the same circumstances in the wards of the Hospital, we might be led at once to conclude in favour of the former, more especially, as by far a larger proportion of the patients in them were males, than of those placed in the wards, and amongst males, the mortality of Fever, though not always, in general is greater than in the other sex. But if the reader will keep in

Possibly fallacious.

mind what has been stated at the commencement of this Essay, with respect to the years 1817 and 1826, “ that a very large proportion of those who then sought and obtained admission, were labouring under no other disease than starvation,” he will readily understand, that such would be selected for the tents, rather than those who were labouring under positive Fever, bearing any resemblance to those pestilential forms of disease, which also continued to prevail at that time.

Observations on the result of the cases which were placed in tents under the author's care.

With respect to those placed in the tents, under my care, who were all male patients, I can state, that in the first month, the mortality amongst them was scarcely 1 in 50 ; and

the average time they remained in the tents, about three days and a half; indeed, in many instances, when there was room for them in the convalescent wards, I remitted them there on my first visit. So long as the fine dry weather continued, this continued to be the case; but, on the commencement of the rains, and when the canvass, and the air of the tents were thus rendered damp, many were attacked with inflammation of the thoracic or abdominal viscera, and required the active employment of venesection for their relief. In making these observations, however, I do not mean to convey any unfavourable opinion as to the safety, or possible utility of placing patients in typhoid Fever under canvass in dry weather; but, I am desirous, that the circumstances of patients thus recovering more generally and quickly in the tents at our Institution, in 1826, should not be misunderstood, and thereby lead hereafter to deductions that might be pernicious in principle and in practice. As to the gangrenous ulcers of the face, hips, and loins, which we had been well acquainted with, some time before, in the wards of the Hospital, I do not think that they occurred more frequently in the tents, than in the wards under my care; certainly not in proportion to the numbers, who were not so affected. It appeared to me, however, after the frost set in, that in such cases as were affected in the tents with gangrene, that disease proceeded more rapidly than if they had been placed in a warm and dry ward; and, on that account, I directed their removal as soon as possible.

No conclusion unfavourable to the tents is here to be derived from the past experience;

Excepting that gangrenous ulcers in those affected appeared to be injured by the cold, after frost set in.

Some inquiry advisable, as to the influence of season in epidemic Fevers.

Having thus, to the best of my abilities, and as far as the occasion would allow, given such support to the principles which have guided my practice in continued Fevers, both under their inflammatory and typhoid forms, as my subsequent experience enabled me to adduce, it might be advisable to inquire how far these forms and complications have been affected by the revolution of the seasons during the past year, independently of the predisposing and exciting causes adverted to at the commencement of this essay. In this, however, it appears that great similarity prevails generally through successive years; and as it forms a part of the present undertaking to describe the other forms of diseases prevalent at different seasons of the year, especially intermittent, exanthematic Fevers, dropsy, and dysentery, and their connection with epidemics, I may refer generally to my former publications upon this subject, but more especially to my report for the year 1816, page 55, and to the subsequent Reports for the years 1820-21 and 23, for a succinct account of the varieties of inflammatory and typhus Fever that have appeared in successive seasons.*

* When treating of the course of epidemic diseases, the increase of maniacal affections, so remarkable within the last seven years amongst all grades of society in this country, should not be passed unnoticed. In recording this melancholy fact, however, I shall not attempt to account for it, further, than by referring to these incidents which were stated to be contemporaneous with the growth and malignity of our febrile diseases, as they may suggest some explanation. The number of maniacal cases in the wards under my care,

The peculiarities of common Fever in the past year, indeed, should not be passed unnoticed; the most striking of these were the increased average mortality, and the equally remarkable decrease of admissions into the Cork-street Hospital, when compared with any preceding year since 1823, the commencement of our pestilential Fever. Viewed in connection with the well established fact, that at all times the average mortality in our Hospital has been greatest, when the admissions have been fewest, and *vice versa*, these peculiarities are the more deserving of attention; and we shall find the same explanation applies to both cases, viz. the characteristics of virulent disease, whether from the *constitutio epidemica*, or contagion, do not appear of late to have been materially changed in the cases of individuals affected; and whenever the pressure of poverty or famine amongst the lower classes, is diminished, they are not disposed to resort to Hospitals for shelter, on slight pretences, nor until sometimes even a malignant Fever has established itself in the constitution.

The peculiarities in epidemics of the past year explained, by fewer coming into Hospital from mere poverty.

There is another circumstance too that will assist to account for the increase of the average mortality during the past year. It is this, that at all times the degrees of mortality depend chiefly on

Increased mortality further accounted for.

within the last seven years, has greatly exceeded those in former years. *Delirium ferox*, and *delirium tremens*, sometimes preceded these maniacal affections.

the number of those who are seized with typhoid or adynamic Fever, whilst lying at home in chronic, sometimes incurable diseases, and in the last stages of which, typhoid Fever often supervenes, thus rendering the sufferers admissable. Hence it is, that we find from the registry of the Hospital, that a large proportion of the deaths that occurred there, during the past year, were those of dropsy, phthisis, pulmonalis, chronic dysentary, and such like, on which typhoid Fever had supervened. For

Many were moribund, and died soon after admission; exemplified by the next case, and post obit examination.

instance, it appears, that of the ten cases which terminated fatally in the wards under my care, during the months of August and September last, six of them were moribund, and died shortly after admission, seemingly in the last stage of dysentery, or dropsy, or palsy, and that the other four, which were cases of typhus gravior, had been many days ill before application was made to the Hospital. As a fair example of such cases of typhus Fever supervening on chronic disease, which have borne so large a proportion of those which terminated fatally in our Hospital during the last year, the following case, and *post obit* examination, affords an instructive illustration.*

* During the month of December, in which those cases of complicated Fever occurred, scarlatina also prevailed; and although it so happened, that few or no cases of it were admitted into the wards of the Cork-street Hospital, under my care; yet I met with it frequently in private practice; in some instances attended with cynanche maligna. In one family, according with what I have stated in former reports, some of the patients, who were not aware of having had

Mrs. Edwards, aged 38, was admitted into the Cork-street Hospital, December 6th, 1828. It happened to be the time of my visit when she was carried up to bed; I found her lying prostrate, in extreme debility, incapable of any motion of her body or limbs; her skin was cold and clammy, and purple on the upper extremities; her countenance was dejected, and features relaxed; eyes, apparently insensible to external objects, were slightly suffused, and affected much by strabismus; respiration laborious, and much slower than natural; pulse indistinct, intermitting, and unequal, but as well as it could be counted, not more than 50 in the minute; speech difficult, and incoherent; voice weak; swallowing also difficult, but an effort to swallow some wine poured into her mouth, made with avidity; some cough. The patient appears to be far advanced in pregnancy, and as well as she can be understood, she states this to be the last month of her gestation.

Prescribed—Let her be attended by Mr. Lawless (the resident accoucher.)

Laventur pedes et manns spiritu vini camphorato et tegantur panno laneo.

R $\acute{x}$. *Aquæ puræ unc. vi. Spir. Ammoniac Arom. dr. ij. Syrupi unc. i. M. Sumat coch. amplum subinde.*
L. D. *Wine eight ounces.*

DEC. 7th.—Since last visit, it has been learn-

scarlatina before, laboured under cynanche maligna, unaccompanied by any eruption; whilst another of the same family had the scarlet eruption over every visible part, accompanied with but a slight degree of sore throat. This was most remarkable in a family whom I attended, along with Mr. Dyas of Castle-street. None of these cases, however, terminated fatally. In September last, I saw some cases of scarlatina also in private practice; and one of a child, two years old, which supervened on hooping cough, terminated fatally, gangrene of the throat having preceded death.

ed from the patient's friends, that she has been six months labouring under severe pectoral complaints, accompanied with spitting or vomiting of blood (they are unable to say which,) and that during that time she had been frequently bled; but that the Fever, for which she was admitted to this Hospital, commenced about eight days before, for which also she was bled twice or thrice in that time. Mr. Lawless reported that he distinguished slight motion of the foetus in utero, and that the os tinsæ was beginning to dilate; no uterine discharge.—She passed a restless night, with much moaning. Fœces and urine passed unconsciously, but abundantly. Skin still cold and clammy, particularly on the extremities; and the arms, from the shoulders to the wrists a still deeper purple hue than yesterday, a colouring which in a slighter degree extends over the whole surface of the body, and even to the suffusion of the eyes and the tongue, which last, she is able to protrude with great difficulty. Swallowing and speech not quite so difficult as yesterday, and she expresses a desire for more wine: otherwise little change.

Prescribed—Let the head be shaved, and washed with camphorated spirit of wine, and covered with flannel.—Cough mixture. *Continuantur alia ut heri.* Wine eight ounces.

DEC. 8th.—According to the accoucher's report, very little change has taken place with respect to the uterus and its contents, and there has been no improvement in the other symptoms described yesterday, except that the pulse is now near 80, but still irregular, unequal, and indistinct. Passed a restless night with low muttering delirium. Still takes the wine given her with avidity. No stool. Urine passed unconsciously.

Applicetur vesicatorium nuchæ. Sumat haustum oleosum statim et postea injicietur enema terebinthinatum cum spumæ cerevisiæ cochlearibus amplis duobus. Continuantur alia. Wine eight ounces.

DEC. 9th.—Rather less moaning and restlessness in the night. Swallowing further improved, and wine preferred to other drinks. The general purpura is considerably faded. Bowels well freed. Stools dark and offensive. Pulse can be more distinctly felt—is less irregular, and about 84 in the minute. Mr. Lawless states, that the motion of the fœtus in utero is less perceptible. Other symptoms not improved, and there is more subsultus tendinum than there was yesterday. Skin cold and clammy.

R_x *Misturæ camphoratæ unc. viij. Tincturæ opii. gutt. xxx. M. Sumat unciam, cum spumæ cerevisiæ semunciâ, tertiâ quâque horâ. Wine eight ounces.*

Towards evening the powers of life were perceived to be rapidly on the decline; and there was no longer motion of the fœtus in utero, to justify a hope, that it would survive the woman herself, or any attempt, which might otherwise have been contemplated, of saving it by speedy extraction, after the death of the patient, an event which took place about 9 o'clock, P.M.

The *post mortem* examination, which I made about 17 hours after death, with Mr. Trant's assistance, was in every point of view highly instructive, but particularly so in showing the distinct traces of chronic and recent complaint, left on the cranial and thoracic viscera, the chief seats of disease; but I mean to speak only of the general appearance, as the minute anatomy is fully described in the annexed statement of the dissection with which Mr. Trant has favoured me. Externally, the vessels on the sur-

General observations upon the *sectio cadaveris*, and upon the distinct traces of chronic and of recent diseases.

face of the brain, but particularly those lying on the convolutions of it were turgid and distended; and as is frequently observed in examining the heads of those who die of typhus Fever, was unaccompanied by any adhesion or thickening of the surrounding membranes. In the ventricles too, lymph was effused, as also frequently occurs, from mere debility, in typhoid Fevers. Towards the base of the brain, however, adventitious membranes, and thickness of those which enveloped it, as well as of the cerebellum itself, indicated affections of much longer standing, which probably were contemporaneous with the tubercles in the lungs, the existence of which was afterwards ascertained.

The dark colour, and in some degree the hepatization, of the lungs, I think, was also mainly attributable to the typhoid Fever; but the tubercles and ulceration of the lungs were the result of inflammation; their existence in the right lung particularly, might be surmised, even before the substance was divided from the particular anthrax form, which its surface assumed. These traces of inflammation were obviously of long standing, and were connected with the pulmonary complaints, which it was said had been urgently felt, for six or seven months previously to the attack of typhus Fever.*

The appearances presented at the Post Mortem examination of — Edwards, 17 hours after death.

“ The subcutaneous callular tissue of the parts where there had been previous extensive cutaneous livid

* These distinct appearances may be seen further illustrated by the cases and dissection of the horses affected with the form of epidemic that prevailed in November 1828. The same degree of hepatization of the lungs was produced, unaccompanied by any signs of adhesion, or other traces of inflammation. See pages 70 and 71. Case ii.

blotches, as the arms, elbow, nates, &c. presented no apparent morbid alteration or effusion.

“ On opening the abdomen, the gravid uterus, in the 7th month of gestation, presented itself lying obliquely to the right side, with its fundus extending above the umbilicus, and its anterior surface somewhat more vascular at some parts than others, but not of that nature or extent that might be construed inflammatory. All the abdominal viscera appeared perfectly healthy, but were somewhat displaced from their natural situation by the position of the uterus.

“ The thorax seemed to be the seat of considerable disease, the right lung having contracted strong adhesions with the pleura costalis in several places, but most considerably at its posterior part, where also it appeared *hepatized*, and tuberculated, some of which were in a state of ulceration at its superior parts. The lung on the opposite side was similarly diseased ; but it appeared to be completely confined to its upper extremity, where several small abscesses had formed from the advanced state of tubercles : a few of the bronchal glands of both lungs felt of a schirous hardness, but still retained their peculiar colour when cut into, whilst others had a considerable quantity of a calcareous matter deposited in their structure ; the cartilagenous rings of both bronchi for some extent along the root of the lungs, had several points of a similar deposit, so as to give to the tubes a peculiar, hard, resisting, bony feel ; and on cutting through them, a gritty sensation under the knife.

“ The brain presented the following appearances ; the large veins which are lodged in the sulci, between the convolutions of the cerebrum, were in a high state of congestion, whilst the arachnoid membrane, immediately covering them, was somewhat opaque, giving a greyish appearance at the sides of those vessels, as if a deposit of that colour had there taken place.

“ The pia mater in the situation, where it covered

the hemispheres of the cerebrum, was but slightly, if anywhat increased in vascularity. On opening the lateral ventricles, they were found to contain nearly three ounces of a perfectly clear serous fluid. The choroid plexus in the right lateral ventricle was thickened to the feel, and of a bright red colour, from the distension of its minute vessels; whilst that in the left had several small serous vesicles intimately connected with its structure. The venæ magnæ galeni, were gorged with blood, and firm to the feel. The inferior surface of the tentorium cerebelli, was found adherent for nearly the extent of an inch to the arachnoid membrane, covering the right lobe of the cerebellum, close to its superior vermiform process—where also was deposited a portion of lymph, larger than a silver sixpence, firm in consistence, and closely adherent to the tentorium at this point. The right lobe of the cerebellum was altered in structure here, being considerably softer than natural, and not retaining, when cut into, the usual arborescent distinction of structures, but appearing blended together, as if they had been broken down into a homogeneous substance, of a soft lardacious consistence. This state of parts did not extend through the entire right lobe, but was confined only to about the size of a *walnut*, and corresponding to the part where the lymph was thrown out, and the tentorium was adherent—the remaining portion of that lobe, as well as the entire of that of the opposite side, possessed their natural structure and appearance on being cut into.”

Other specimens of a form of typhus Fever met with in the winter months.

As specimens of a form of typhoid Fever, not unfrequently met with in the wards of the Fever Hospital, in the winter months, I beg leave to add the following cases, and with them to conclude my history of our epidemic typhoid Fevers. They appear to me to be interesting on many accounts; amongst which it

may be mentioned, that they afford an example of extreme danger, such as seldom recover under any treatment ; but that on the treatment in the commencement, of such complicated cases, ultimate recovery must mainly depend.

John Baker, aged 64, an attorney's clerk, whose constitution had been previously broken down from habits of intemperance, and a sedentary mode of life, and had laboured under bad and extensive ulcers of his legs, apparently connected with the general cachexy, was attacked on the 10th of December with strong rigors, which were succeeded by Fever ; and on the 13th of that month, he was turned out from his lodgings, and carried to the Hospital gate, where I found him at the hour of my visit, in the lowest state of debility. Having ordered him to be carried to a bed in the wards under my care, I soon after visited him there. His countenance was sunk ; eyes hollow and anxious, somewhat suffused ; voice feeble and inarticulate ; skin cold and clammy, with a general livid hue over every part of the surface ; but that over the legs and arms, down to the toes and fingers, dark purple ; the legs interspersed with several bad ulcers ; frequent hiccup ; urine passed unconsciously ; frequent diarrhœa ; stools putrid sanies ; no pulse at the wrist until warm wine was administered, and the extremities were chaffed, and covered in flannel, when the circulation of the blood was in some degree restored ; but so feebly, as to be very indistinctly felt at the wrist. *Subsultus tendium*. He now complained of headache, but still more of extreme debility, and drank the wine and cordials given him with avidity.

Prescribed—*Tondetur capillitium et postea lavetur caput, spiritu vini camphorato, et tegatur panno laneo. Applicetur vesicatorium nuchæ.*

Foveantur pedes et manus spiritu vini camphorato tepido, et tegantur panno laneo.

Rx. Misturæ Camphoratae, unc. vi. Spiritus Ammoniac, Arom. dr. ij. Tincturæ Opii, gutt. xxx. Syrripi, unc. i. M. et signa. Sumat coch. ampla duo, cum spumæ cerevisiæ sochleare amplo, secundâ quâqua horâ. Injicietur Enema Terebinthinatum cum tincturæ opii gutt. xxx. Fricetur abdomen oleo Terebinthinæ, et tegatur panno laneo. Wine, eight ounces. L.D.

In the evening, symptoms in general were improved ; but pulse still extremely feeble, about 100 in the minute. Temperature taken, by placing the thermometer under the tongue, 92°.

DEC. 16th—Got some rest, and his general appearance improved ; purpura of the extremities, and general lividity of the skin somewhat diminished ; several feculent discharges, and urine passed voluntarily ; no return of hiccup or subsultus tendinum since midnight ; the ulcers on the legs began to discharge freely an extremely fœtid ichor ; he took his wine and medicines well, and asked for an increase of wine and cordials.

Prescribed—Curetur pars nuchæ vesicata, unguento spermatis cæti. Continuentur alia ut heri prescripta sunt. Wine, 8 ounces. L.F.L.

DEC. 17th—Got several hours quiet in the night ; and is to-day in every respect better ; pulse firm, 86 ; some appetite.

Repetatur mistura camphorata, cum spumæ cerevisiæ semi uncia. Omittantur alia. Wine, 10 ounces.

Dec. 18th—Felt better in every respect ; relished his wine, and craved more ; purpura much faded ; pulse 80, still feeble ; copious discharges of ichorous sanies from the sores on the legs.

Continuentur omnia ut heri prescripta sunt.
Wine, 12 ounces.

DEC. 19th—Died at ten o'clock this morning, after sitting up some time before, at the fire.

I expected to have been allowed to make the *post mortem* examination in this case, as there were no friends of the deceased to make any objection to it; but the resident officers of the Institution, under the existing regulations, would not allow it. The body was covered over with purple spots; the extremities of a dark purple; gangrene had extended the old ulcers on the legs deeply and widely.

Three other cases which terminated fatally, a few hours after admission, in the month of December, had also purple extremities; and a brief history of them may therefore be desirable. Three other cases, with purple hands and feet.

James Crotty, aged 28, ill eight days, was admitted on the 23d of December; and when I first saw him, he was apparently morbund; lay comatose, breathing difficultly; the head was drawn back, as in opisthotonos; the trachea protruded. He was insensible, speechless, and motionless; skin cold and clammy, generally livid, and the extremities purple. The throat and extremities, being well rubbed over and covered with flannel, his pulse and warmth were in some degree restored, and he drank wine with avidity, and was afterwards able to protrude his tongue, which was loaded and white. Since admission, he had discharges from his bowels unconsciously, both of urine and stools, the latter ochry, and of an acrid fœtor; temperature now taken, by placing the thermometer as usual under the tongue, was 98°; pulse 74; unequal and feeble.

Prescribed—Tondetur capillitium, et lavetur caput rasum spiritu vini camphorato ; tegantur caput, pedes, et manus panno laneo. Applicetur vesicatorium nuchæ.

Rx. Misturæ Camphoratæ, uncus sex. Spiritus Ammoniac Arom. drachmas, ij. Syrupi semiunciam. M. Sumat, unc i. cum spumæ cerevisiæ, semiuncia omni bihorio. Sumat Pulveris doveri, gran. vi. sextâ quaquâ horâ. Wine, 8 ounces.

DEC. 24th—Took his medicines well ; had some rest ; opisthotonos, and swelling of the trachea somewhat diminished. No stool for the last twelve hours ; urine passed unconsciously, but copiously.

Prescribed—Injicietur, quam primum, enema terebinthinatum cum olei ricini unc i. et tincturæ foetidæ, drachmis, ij. Repetantur alia. Wine, 8 ounces.

For a few hours, he appeared to Mrs. Bridges, and the nurses under her, to grow somewhat better, but at midnight, general spasms came on, and soon afterwards, he expired. The livid hue of the body, and purple colour of the extremities after death, were remarkable in this case also.

Michael Byrne, ill five days, was admitted on the 24th of December, with livid erysipelas over the whole face, and extended to the scalp ; the extremities having a tendency to a purple hue ; skin hot and dry ; tongue brown and parched ; pulse 120, and hard ; complains of severe deep-seated headache, with tinnitus aurium ; bowels free ; stools orange ; urine free and crude.

Applicentur hirudines xii. fronti. Foveantur pedes bis in dies aquâ calidâ. Sumat pulveris antimonialis, gr. iii. octava quaquâ horâ. Low diet.

DEC. 25th—Headache relieved; the erysipelas of rather a better colour, but still more extensive; the leeches drew well; several orange coloured stools.

Prescribed—*Aspergatur facies farinâ tritici aridâ. Sumat pulveris doveri, gr. vi. sextâ quaquâ horâ. Repetatur fots pedum.*

DEC. 26th—Had no unfavourable change till this morning early, when the erysipelatous swelling suddenly disappeared; and he died apoplectic at 10 o'clock, P.M.

The body, even at 11 o'clock, the hour of my visit, had generally assumed, a deep purple hue, but particularly over the face and extremities.

The next and last of those fatal cases which I shall venture to make room for, is that of Mary Blake, aged 18, who was admitted also moribund, on the 25th December. Previously ill 18 days.

On my visit, soon after her admission, I found her skin cold and clammy, thickly interspersed with dark measly petechiæ; her lips, tongue, and cheeks were purple, and the extremities, both upper and lower, also purple; temperature, taken by placing the thermometer under the tongue, 90°; pulse so indistinct, irregular, and unequal, as not to be counted. By her desire, she was supported on the bed, made at an angle of about 45°; moaned constantly, and complained of severe pain over the whole abdomen, which was increased by the slightest pressure on that part; she was free from either coma or delirium, and her voice was stronger and clearer than could be expected, considering the other symptoms. She stated that she had been about eighteen days ill; that

her illness commenced with shivering, succeeded by Fever; that the pain in her belly supervened about a week afterwards; that she had both uterine and intestinal hæmorrhage in the course of her illness; but that previous to it the catamenia had been regular, and otherwise enjoyed good health: that she had been twice bled in the course of her illness, and that she had no discharge from the bowels or the bladder in the last two days; but that the last two or three alvine discharges she had had, consisted of dark blood. The abdomen is so generally swelled and sore, on the slightest pressure, that it cannot be ascertained whether the fundus of the bladder rises above the symphysis pubis, or not. Swallows well, and wine with avidity. Frequent hiccup;—breathing hurried and laborious.

Prescribed—*Laventur pedes et manus spiritu vini camphorato, et tegantur panno laneo; foveatur abdomen spiritu vini camphorato et aquâ calidâ; postea, fricetur oleo terebinthinæ et tegatur panno laneo. Sumat quam primum haustum oleosum cum olei ricini semiuncia, et olei terebinth. dr. ij. Postea injicietur enema emolliens; et repetantur haustus et enema omni bihorio ad alvi solutionem. Utetur cathetere pro re natâ. Wine, ad libitum.*

The relief from these means, though gratefully acknowledged by the patient, did not retard the rapid approach of dissolution, which took place without pain at day-break, on the succeeding morning.

The body was covered over with dark spots; the face and extremities continued purple, as they were described to be before death. The regulations of the Hospital, confine my *post mortem* examinations to these very limited details.

The last case, however, appeared to me to be

highly instructive, both as an example of the most malignant kind of the epidemic Fever of that period, and as an illustration of that complication of typhoid Fever with peritonitis; and so strongly resembled puerpural Fever, as to afford further confirmation of the opinion which I have already expressed, that puerpural Fever itself is in its nature typhoid or adynamic; at least, that it differs in degree and severity from those slight and transient Fevers which so often succeed parturition, only in proportion to the degree of typhoid Fever which supervenes on them.

INTERMITTENT FEVERS.

Febrile diseases had a more general tendency to intermittent and remittent forms in the past, than had been observed for many years before; and this is the more remarkable, because that, in this, as well as in those years, when agues most prevailed, it so happened, that continued Fever was less frequent than in other years; this was remarkable too in the year 1809, as may be seen in the synoptical view of the progress of our epidemics, at page 8. But though, on occasions like the present, such circumstances should not be passed over unnoticed; the time or space left for remarks on them, demand that they should be very brief.

Notice of the prevalence of agues, in 1828, must necessarily be brief.

In a former part of this Essay, I stated my opinion, that those physical and moral causes which have given so much of a typhoid or adynamic character to our epidemic Fevers, had also by that characteristic debility, obliterated the lines by which agues had been designat-

The usual effects of malaria less perceivable, while the causes of adynamic fever were urgent.

ed; opinions, which appear to me to be supported by the facts under consideration. For, it appears, that whenever the general tendency to typhoid debility was so far moderated as to admit of those constitutional efforts, on which those periodical revolutions depend; malaria, the generally supposed cause of agues, has been productive here also of its usual effects, and whatever *constitutio epidemica* otherwise existed, Fevers assumed certain well-defined periodical revolutions. In the last spring the cases of ague which I witnessed, did not indeed always come from the vicinity of marshes, either here or in England, as I have known to happen formerly. But the prevalence of easterly winds, which was contemporaneous with that of agues, rendered our city, lying as it does on the western margin of an extensive strand, more generally liable to malaria, than at other times; and the exciting causes of our continued Fevers being less urgent than at other times, symptoms of ague were more frequently the consequence of such exposure.

The leading opinion which influenced my practice in the treatment of agues.

It is, however, chiefly with a view to an opinion which greatly influenced my practice in agues, at the period under consideration, that I am desirous of giving a synoptical sketch of 27 cases, which I treated in the months of April and May last. That opinion is, that though the periodical revolutions which characterise agues, were observable in these cases; still, that they were more or less under the debilitating influ-

ence of the same epidemic constitution, and also of the same moral and physical causes which hitherto prevailed, and even at the same time impressed some cases of Fever with the characteristics of typhus, in an exquisite degree. I therefore did not employ bleeding in any case, unless when manifest signs of inflammation, during apyrexia, or in the sequel of agues, demanded that remedy; but my practice consisted in administering an emetic at the commencement of the cold fit, and in assisting to shorten that period by warm clothing and warm drinks; and in the intervals between paroxysms, having first insured the due freedom of the bowels I administered the sulphate of quina in such doses as were found sufficient for arresting the progress of the disease.

What the practice consisted in.

The following Table exhibits the result of this practice in all the cases that passed under my care at the Hospital, in April and May last, which amounted to 27 in number. The first column contains the name; second, the age; third, the day of admission; the fourth, the number of days previously ill; fifth, number of days in Hospital; sixth, the type; seventh, the doses of sulphate of quina; eighth, how often administered in the day; ninth, the entire quantity administered in each case; and the tenth, some general observations.

Construction of the following Table.

TABLE OF TWENTY-SEVEN CASES OF AGUE.

NAMES.	Age.	Day of admission.	No. of days previously ill	Days in Hospital.	Form of Fever or Type.	The dose of sulphate of quina.	The total quantity of sulph. quina given.	OBSERVATIONS.
Michael Killen	42	29th March,	Not known	14	Tertian	2 grs.	42 grs.	This ague supervened on continued Fever two days after admission to the Hospital. Two emetics were administered during the rigors of the two first paroxysms; and mercurial and saline purgatives were administered in the apyrexia.
Philip Smith	27	4th April,	11	8	Tertian	ditto	18 grs.	This was a genuine case of tertian ague. Two emetic draughts were administered, and mercurial aperients afterwards.
Daniel Garryn	34	16th April,	10	13	Tertian on pneumonia	ditto.	42 grs.	This case supervened on pneumonia, for which disease the patient had been bled largely before admission, and three times afterwards, during the apyrexia.
Daniel Keough	26	— March,	7	42	Quotidian irregular on palsy	ditto.	92 grs.	This ague supervened on palsy, that had taken place during typhus Fever. He had been bled largely before I saw him for the paralytic affections.
Patrick Reilly, ...	34	22d April,	10	14	Tertian regular	ditto.	58 grs.	Three emetics in the rigors, aperients, and one anodyne draught. This case supervened on continued Fever.
Elizabeth Williams ..	28	5th April,	7	43	Quotidian on typhus	ditto	72 grs.	This case is detailed under the head of typhus gravior, terminating in gangrene of the feet.
Nicholas Kearns	24	25th April,	7	10	Simple Tertian	3 grs.	63 grs.	Two emetics in the rigors; mercurial and saline aperients—one anodyne draught.
James Hughes	29	3d May,	8	9	Simple Tertian	2 grs.	30 grs.	One emetic in the rigors—aperients in the interval.
James Campbell	23	27th April,	3	18	Tertian after 3d May	ditto	43 grs.	Was a week in the Hospital before the case assumed an intermittent form. Two emetics in the rigors.
Thomas Connolly	27	4th May,	3	10	Double tertian	ditto	24 grs.	A week in Hospital before the case assumed an intermittent form.
Michael Fitzgerald ..	23	1st May,	5	13	Tertian	ditto	30 grs.	Was bled and blistered for inflammatory symptoms, that preceded the ague before admission. Two emetics in the rigors.
Miles Byrne	18	12th May,	13	13	Tertian on sequel of measles	ditto	24 grs.	Was bled and blistered in the measles, which preceded the ague. Two emetics were given in the rigors after admission.
Laurence Hand	23	29th April,	3	17	Tertian on synochus	ditto	18 grs.	Was twelve days in Hospital before his Fever assumed the form of ague.
Thomas Williams	42	15th April,	9	29	Quotidian on typhus	ditto	36 grs.	This case may be seen detailed under the head of specimens of typhus gravior. He was thirteen days in Hospital before the ague commenced.
William Spencer	34	27th April,	7	36	Tertian supervening on typhus	ditto	110 grs.	This case is detailed under the head of ague, being a remarkable and complicated specimen of it.
Pat. Reilly (relapse) ..	34	14th May,	4, relapse	10	Tertian	3 grs.	27 grs.	This relapse first assumed the form of continued Fever, on which the Tertian supervened.
Nathaniel Kearny	26	14th May,	3, relapse	9	Tertian	2 grs.	36 grs.	This case also relapsed, and then assumed the form of continued Fever, and the Tertian succeeded.
John Whelan	17	9th May,	2 months	16	Tertian	ditto	36 grs.	Two emetics in the rigors.
Samuel Groves	53	15th May,	11 days	14	Tertian	ditto	18 grs.	Simple Tertian.—One emetic.
Michael Connor	28	16th May,	3	18	Tertian on pneumonia	ditto	45 grs.	Tertian combined with pneumonia.
James Byrne	40	5th May,	4	8	Quotidian	3 grs.	12 grs.	Emetics repeated three times in the rigors.
John M'Keon	30	4th May,	5	9	Tertian	2 grs.	54 grs.	The first six grains of the Sulphate of Quina used in this case, seemed to have arrested the disease, aided by two emetics.
Elizabeth Byrne	25	12th May,	3	25	Quotidian supervening on sequel of measles	3 grs.	101 grs.	Was bled frequently for the sequel of measles, before the ague commenced, which was on the 22d of May.—Took three emetics in the rigors.
John Martin	40	24th May,	4	19	Tertian	ditto	84 grs.	This ague supervened on continued Fever, at the close of my attendance for two months at the Hospital.
Owen Ferguson	28	20th May,	6	19	Tertian	ditto	84 grs.	Two emetics, and thirty-six of the eighty-four grains of Quina which he took, were prescribed during the four days of my attendance on him.
John Troughton	34	4th June,	7	Left in Hospital	Quotidian	ditto	—	
Charles Stewart	36	4th June,	5	Left in Hospital	Quotidian	2 grs.	—	These two cases remained in Hospital after my attendance for a period ceased.

The doses were administered three times per day.

Though I can afford but little space for remarks on the preceding table, which contains the Brief remarks on the preceding Table. cases of ague that passed under my care in the Cork-street Hospital, during the months of April and May last; yet it is perhaps expedient to explain some of the principles of the practice, set forth in that tabular view. I did not employ bleeding in any instance, in which symptoms of inflammation were not manifest during the interval between the complete cessation of one paroxysm, and the commencement of another; for, from perceiving that intermittents frequently alternated with continued forms, and that the latter were sometimes of a typhoid type; though agues, owed their peculiar characteristics to malaria, as the chief exciting cause; yet, they appeared to me to be more or less influenced by that epidemic constitution which, I stated in treating of continued Fevers, to have a tendency to produce adynamic Fever.

In such cases, however, but especially those of James Spencer, and William Reilly, who Cases in which bleeding for the symptoms of inflammation was very fortunately omitted. happened to be in the hot fit of a paroxysm at the time of my first visit: the precaution just suggested, and thereby not to confound constitutional re-action with inflammation, appeared to me to be attended with decided advantages. These patients, whilst in the hot fit, complained of severe pain and oppression at the chest and sides, which indicated venesection, the employment of which I accordingly prescribed, but not until the paroxysm had entirely subsided, and then only

proportionate to the constancy and urgency of the pain and oppression; but as both these symptoms subsided along with the paroxysm, bleeding was not employed at all—a very fortunate omission in these cases; for in that of Spencer, universal jaundice, malænous vomiting and purging, together with extreme debility afterwards, gave it most of the characteristics of yellow Fever; symptoms which were relieved by mercury, local bleeding from the hemorrhoidal vessels, and successive blisters over the hepatic region, previously to the administration of the sulphate of quina. And in the other case, that of Reilly; petechiæ, green vomiting, spasmodic twitching of the limbs, and other symptoms of typhus gravior succeeded, and required appropriate treatment, before the bark was administered, to arrest the aguish paroxysms which supervened.

Bleeding employed in the intervals.

In some cases, on the other hand, such as that of Elizabeth Byrne, in which symptoms of visceral inflammation had supervened in the interval, bleeding was employed, and repeated, proportioned to the degree of inflammation, indicated by pain in the part engaged, and so as to relieve that symptom, before the sulphate of quina was again resumed.

Ague supervening in phthisis pulmonalis.

As an example of ague, in which bleeding became necessary in the interval, and also remarkable for the course that disease took, on supervening upon phthisis pulmonalis, the following case may be acceptable to the reader; and on

that account, I shall take leave to transcribe it from my private journal.

A lady, 22 years of age, who had been married about 10 months, consulted me at her lodgings in Dundrum, on the 15th of August last, for ill health, which she stated to have commenced about twelve months before with cough, hurried respiration, and pain of the left side; symptoms that were succeeded by emaciation and debility, and by the catamenia occurring more frequently, and in greater quantity than before their first appearance, which happened at an earlier age than usual. During the first three months after marriage, her symptoms in general appeared to be improved; but they increased rapidly after a miscarriage, which afterwards took place; and subsequently, copious night sweats hurried on the emaciation. About May 7th, the day on which she moved to a lodge on the western bank of the lake in the Phoenix Park, she was attacked with quotidian ague, the first paroxysm of which was in the forenoon, between 10 and half-past 11 o'clock, and it has continued to return at nearly the same hour ever since; although, before and since her removal to the present residence, she had employed various preparations of bark, particularly the sulphate of quina, in large doses. At 3 o'clock, P.M. on the day of my first visit, though the aguish paroxysm had for some time ceased, she still complained of severe and acute pain in the left side, extending across the chest, the scrobiculus cordis, and to the back;—pain which was increased by pressure, and when she attempted a full inspiration; no appetite; frequent sickness at stomach; some diarrhœa; night sweats so copious, that linen requires to be changed three times each night; the skin is hot and dry; urine scanty, with copious furfuraceous lateritious sediment.

Prescribed—Mittetur sanguis e brachio ad uncias ix.

Rx. Aquæ tepidæ, unciam i. cum semiss. Sulphatis Zinci, gr. vij, Pulv. Ipecacu. gr. xv. Fiat haustus cras mane. superveniente rigore cum potu aquæ tepidæ sumendus.

Let her diet consist chiefly of milk ; and let a small quantity of claret, largely diluted, be substituted for the stronger wine hitherto taken for the relief of debility.

AUGUST 16th—The blood drawn yesterday, immediatly assumed the sizzly surface, and was covered over with a white dense buff, of very firm tenacity, and was cupped. The pain was much relieved during the operation, and more than ten ounces was taken. The relief continues, and the night sweats were much less copious. The emetic operated quickly this morning, and the aguish paroxysm was much shorter than before ; feels less sickness at stomach, and some appetite ; pulse 100, and soft ; expectoration more free ; the spits were dense, white, and brittle, and sink to the bottom of a glass of water.

Rx. Gum Myrrhæ, Pulv. Ipecac. āā, gr. x. Pulv. fol. digitalis, gr. v, Syrupi, q. s. fiat massa, et divide in pululas decem æquales. Sumat unam ter indies ex misturæ sequentis cyatho vinoso.

Rx. Decocti Lichenis Islandici, Infusi Marubii, āā uncias vij. Syrupi Tolutani, unciam i. Acidi Sulphurici, q. s. ad gratam acorem, M. Asses milk twice a day.

AUGUST 18th—Some improvement in the general symptoms since last report, and the paroxysms are lighter ; the night sweats somewhat abated, but complains of a distressing sense of cold, at night, particularly, towards morn-

ing; strength and spirits improved, and she feels a desire to try riding on horseback.

Let her wishes in that particular be cautiously indulged; and let a shammy leather waistcoat be ready to put on, whenever the sense of cold is felt at night. Let the diet and medicines already prescribed, be continued.

AUGUST 20th—Feels weak and oppressed this damp day; but neither the night sweats or sense of cold have been felt the last two nights as much as before. The pain at back, and oppression at chest, however, are more severe than since the day on which she had been bled. Felt the debility when raised on horseback chiefly to affect her back. Belly costive, and slightly sore on pressure. Took the emetic this morning on the approach of the aguish paroxysm, which was thus instantly arrested.

Prescribed—*Applicenter emplastra gummosa ampla, unum, marginê adhesivâ sterno et scrobiculo cordis, alterum dorsi inferiori parti, et sacro.*

Rx. Decocti Aloes Comp. uncias, ij. Vini Rhei, drachmas, ij. M. et divide in haustus duos æquales. Sumat unum quamprimum et alterum ut alvus postulet. Continuentur alia.

AUGUST 22d—Four o'clock, P.M.; no aguish paroxysm since the 20th, until this morning, when it commenced with a sense of coldness, unaccompanied by shaking; it continued till two, and she thinks it was brought on by walking in the garden, whilst the walks were still damp. Bowels still costive, though she took the aloetic draught each morning; the pain and oppression at her chest have returned in a considerable degree, which she attributes to exposure yesterday to the harsh winds. Pulse 120, and full.

Rx. Pilulæ Colicynth. Comp. gr. xv. Capsici, gr. iv. Antimonii Tartar. semigr. Syrupi, q. s. fiat massa in pilulas granorum v. divide. Sumat unam quamprimum cum haustu aloetico. Continuentur alia.

AUGUST 24th—Half past four, P.M.; no aguish paroxysm yesterday, but had one to-day, preceded by slight shaking; it continued for two hours; the pill and draught operated well, and scarcely any night sweats last night; expectoration more scanty; pain under the sternum extending backwards, much increased, and impedes respiration and cough; pulse 130, and hard; tongue white, but soft; appetite and strength improved.

Prescribed—Mittetur sanguis iterum e brachio ad uncias, viij.

Repetatur haustus emeticus superveniente rigore. Repetantur etiam pilulæ et mistura pectoralis.

AUGUST 26th—No return of ague since last report; the night sweats and cough considerably abated; still complains, however, of severe pain and oppression at the chest.

Prescribed—Applicentur hirudines x. parti dolenti.

Repetantur pilulæ cum pulvere foliorum digitalis, et mistura cum decocto lichen. island. et infus. marubii ut antea prescriptæ sunt.

AUGUST 28th—There has been a considerable amendment in all the symptoms of the pulmonary affection since the application of the leeches, and the due freedom of the bowels; pulse 84; slight aguish paroxysms have however come on, each succeeding morning.

PRESCRIBED,

R. *Sulp. Quinæ*, gr. ij. *Pulv. Ipecac.* gr. i. *Extract Glycirhizæ*, gr. ij. *fiat pilula ter in die sumenda.*

No return of ague afterwards; and for some weeks the pectoral complaints appeared to be arrested, as I learned, for I did not see this lady afterwards, except casually on the road, when she was removing into town, in October; and when I was sorry to perceive there was still great emaciation and a phthisical complexion; I since learned, that soon afterwards, a large abscess formed under the fascia of the left pectoral muscle, which was the harbinger of speedy dissolution.

The commencement of the ague in this case, immediately after the removal of the patient to reside on the banks of a marshy lake, is in itself worthy of notice, as it affords an example of the direct effects of malaria. Besides the proximity of the lake, however, I believe the situation of that part of the city's environs in its neighbourhood, from its being north-west, and nearly on a level with the adjacent strand, which is much more generally covered with the *debris* of vegetable matter, render it more liable to the effects of malaria, than those parts which lie more to the south; and, perhaps too, those inhabiting the country in the neighbourhood of the Black Rock, from its being situated higher, and opposite a cleaner strand, are, on that account, found to be less liable to agues, than those other places on the verge of the sea. During the prevalence of ague, however, in the past year, the continuance of easterly winds, as may

Observations
on the preced-
ing case.

be seen by consulting the meteorological table, gave to the epidemic constitution in almost all febrile diseases, both in the city and surrounding country more or less of an intermittent character.

The type of
ague, first ter-
tian.

With respect to the type of agues, if it was allowable to judge from the cases placed under my care, I would say, that tertians prevailed in the spring months more generally than any other form; and quotidians more frequently, as the summer approached; soon after that transition, however, agues either ceased altogether, or assumed the continued form.*

The dose of
the sulphate of
quina ascertain-
ed by its effects.

As to the dose of sulphate of quina, on which I know there is considerable difference of opinion amongst respectable practitioners, I was decided by its effects, and therefore did not exceed the quantity stated in the Table; but I may observe, that rather a larger dose appeared to me to be necessary for the cure of agues in later than at earlier periods of the season, in which they prevailed: and hence, I was latterly induced to increase the dose from two to three grains administered at similar intervals. To the efficacy of emetics, however, I am disposed to attribute much of

* I had no case of intermittent Fever under my care at the Hospital, after the month of June, 1828, until the 16th of January, 1829, when Mary Dignam, 28 years of age, was admitted from James's-street, with regular tertian ague, which was cured by two emetics, and 30 grs. of the sulphate of quina, administered in doses of three grs. three times a day.

my success in arresting agues with such small doses of the sulphate of quina, and cannot help thinking that it is owing to the omission of them, or of their timely use, that the sulphate of quina in moderate doses, has been stated to have so often failed. I have, therefore, noted in several cases in the table, how often emetics were administered in aid of the sulphate of quina.

Smaller doses of quina needed when emetics were administered in the cold fit.

In concluding those few brief observations on my treatment of intermittent Fevers, I should not omit to notice the prevalence of *tic doloieux*, which, as well as other forms of *neuralgia*, partook much of the character and nature of intermittents, and were therefore benefited or cured by similar treatment. Gastrodynia, under an intermittent form, occurred to me in several instances in private practice, in the early parts of the spring, sometimes in those who had predisposition left by former attacks, sometimes coming on for the first time. Hemicrania also prevailed in the same manner, at the same period. In many of those cases, local, as well as general bleeding had been previously employed without success. In many, too, purgatives, even calomel, so as to effect the system, gave as little relief, though aided by anodynes to moderate the pain during paroxysms; pain too, which seemed to be increased by the exhibition of the sulphate of quina, or any other tonic, without due preparation. By administering emetics, however, in the first instance, such as warm water simply, which I have found sufficient for the purpose, in

The prevalence of *tic doloieux* and other forms of *neuralgia*.

Not relieved by other means, till emetics had been employed.

cases of gastrodynæa, or hemicrania, anodynes seldom failed, to give relief, especially either cicuta, and hyoscyamus alone, or if necessary, combined with opiates, and administered during the paroxysm; and the sulphate of quina administered afterwards in the interval, has generally prevented its recurrence.

Several cases of *tic dolo-
reux*, treated as other cases of intermittent neuralgia.

Several cases of *tic dolo-
reux*, in its most exquisite form or degree, also occurred to me in the course of the past year; and I treated them in the same manner as those other forms of neuralgia just adverted to, and with similar success; my limits, however, will admit but of a brief notice of three such cases, which, now I am the more desirous to record, because, though they were perhaps as immediately connected with the epidemic constitution that prevailed; yet, in all of them, there was a stronger and more inveterate predisposition given by former attacks.

CASE I.

The first of these was that of a gentleman, aged 84 years, whose constitution, naturally vigorous, had suffered on his retirement from active life, about twenty years before; and whose mental and bodily complaints, in a few years afterwards seemed to produce, and terminate in, an extensive ecchymosis, and ultimately, in a large phagedenic ulcer above the angle of his right leg, which for several years discharged copiously. It appeared also, that previously to his first serious indisposition, he was subject to frequent hamorrhoidal discharges, and afterwards to *procedentia ani*. About the year 1820, the discharge from the ulcer in the leg ceased, whilst the veins of it became generally varicose: thence-

forward he was subject to vertigo, nervous sensations, and stomach complaints alternately ; which, though relieved by appropriate remedies, so as to enable him to resume his active habits and amusement in the cultivation of his domain, yet they returned at certain intervals ; and in 1824, assumed the form of *tic dolooureux* in its most urgent degree. Among other remedies, which he tried with various results, was the carbonate of iron, as recommended by Mr. Hutchinson, whose book, at the instance of his friend and fellow-sufferer, the Dean of Cork, he possessed himself of, to be guided by its precepts. For some time, this remedy seemed to agree well with him, both in retarding the return of the paroxysms, and rendering them less severe at each return. But in 1826, the visitations seemed of a more serious nature, and an apoplectic attack, (from which he tardily recovered, under free evacuations of the sanguiferous system, aided by blistering, aperients, and James's Powders, combined with foxglove,) for many months threatened permanent paralysis of the left side. These threatenings, however, afterwards disappeared ; but with his natural mental and bodily vigour, the *tic dolooureux* also returned with more than its pristine severity. Under these circumstances, I had recourse first to local applications, and anodynes, with little relief ; and then made trial of tartar emetic in solution, so as to excite nausea, and ultimately, full vomiting. The discharge from the stomach was acrid ; some relief immediately followed, and anodynes were restored to their usual power in moderating pain, and promoting sleep ; the intervals since have been long, and the attacks, when brought on by neglect of the due freedom of his bowels, any inattention to the diet enjoined, or by too free exposure to cold and damp days, are much lighter, and easily subdued by a nauseating dose of the solution of tartar emetic.

In the commencement of January, 1829, this gentleman was severely attacked with inflammation of the lungs, in consequence of exposure in his open vehicle to the extreme cold air, which then prevailed; and though relief more than once followed the usual remedies in such cases; yet, ultimately, dissolution took place on the last day of the month. In one of those intervals of relief, he had a slight return of *tic dolo-reux*, the only one, however, for many months before his death.

CASE II.

The next case I shall notice, was that of a lady, in her 56th year, unmarried, well formed, but full habit, who had been affected with *tic dolo-reux*, with various degrees of severity, from an early period of her life; and both in this country and in England, she had employed a variety of remedies, under the direction of eminent medical practitioners, with but indifferent success. When she consulted me first, at the beginning of last summer, on account of nervous and bilious affections, which had been unusually distressing since a severe febrile attack, with which she was seized the year before, at her country seat, in the county of Wicklow, she despaired of ever obtaining any permanent relief from the *tic dolo-reux*, and only desired some addition to those anti-bilious and nervous medicines, which, from their continued use, had latterly lost the effect they first had in correcting the irregularity and debility of the circulation, as well as the weakness and spasms of her limbs, by which she was debarred from her usual active exercise, excepting equitation, which alone, of all the means she had employed, appeared to be now beneficial to her. She further informed me, that the catemenia had ceased, shortly before the attack of nervous Fever; and that by the use of cold affusion, locally ap-

plied, a strong tendency to hæmorrhoids, which succeeded the Fever, and to which she was hereditarily predisposed, had been prevented; a predisposition which she was aware of from her childhood, and had corrected it by similar means. The activity of mind and body, for both of which this lady was remarkable, was now, particularly that of the former, in a great measure impeded; and the returns of the attacks of tic dolooureux were frequent and severe; the pulse so small and feeble, particularly in the left arm, as to be very indistinctly felt; but as well as I could count the irregular beats of the artery at the wrist, they did not exceed 50 in the minute. This debility of the circulation she stated to increase at night; so that she supposes the pulsation of her heart and arteries sometimes ceased altogether, and this was generally preceded by coldness of feet, and palpitations of the heart, and often succeeded by tinnitus aurium, and clammy perspiration. The tongue was loaded, and dark brown; the bowels requiring most active purgatives, to be kept moderately free; the alvine discharges sciballous, very fœtid, and acrid; urine scanty, with much pink-coloured sediment; but at other times copious and limpid.

Prescribed—Close attention to diet, and selection of those kind of animal food which, from experience, she found agreed best with her stomach; but with respect to it, to invert the order of the meals, taking it rather at breakfast than at dinner; that wine, particularly at night, should be taken in aid of the aromatic, and antispasmodic mixtures. I also prescribed wine, to relieve the tendencies to asphyxia, whenever they came on; that warm water should be substituted for cold water, in that local affusion accustomed to be employed; that pills of compound colycinth, tartar emetic croton oil, assafœtida, and capsicum, be taken

with draughts of compound decoction of aloes, aided by turpentine enemata, so as to insure the due freedom of the bowels ; and that pills composed of the extract of cicuta, hyoscyamus, and opium, be commenced after the bowels are freed, so as to promote rest and freedom from pain ; and that the feet, as high as the ancles, should be bathed in warm water, with an infusion of mustard and horseradish.

Under such treatment, progressive amendment was soon observeable ; and this amendment was promoted by the exhibition of nauseating doses of the solution of tartar emetic, and sometimes so as to excite full vomiting, on any tendency to a recurrence of the *tic dolo-reux* ; also by the application of leeches close to the hæmorrhoidal vessels ; as indicated by the distention of these vessels ; and by shaving and blistering the head on one occasion, when the determination to it alternated with that to the hæmorrhoidal vessels.

When the vigour and regularity of the circulation, and the due power of digestion, had been thus promoted, tonics, particularly sulphate of quina, were employed with advantage ; and for several months past, this lady has enjoyed total freedom from any attack of *tic dolo-reux* ; and in most other circumstances, she is restored to renovated health, except occasionally, slight bilious disorder, connected too with vicarious hæmorrhages, which have appeared from time to time to attend her recovery.

CASE III.

The last case of *tic dolo-reux* which I shall venture to make room for, is that of Mr. —, a respectable hat merchant, of about 30 years of age, of spare habit, and pale countenance, who, in passing from his heated factory to his warehouse, as he was daily accustomed to do,

contracted this painful complaint, which increased to such a degree, in the summer of 1827, when he consulted me, that during the paroxysms of pain, he was totally incapable of either mental or bodily exertion. Various means had been employed for his relief; such as extracting injured teeth from the affected jaw, an operation, which in this instance, increased the distress; bleeding and evacuations were tried with as little success; and anodynes, except the smoking of stramonium, from which he thought he sometimes derived relief, had no effect in moderating or relieving his pain, or cutting short a paroxysm; his appetite, he stated to be generally good; and that some days, or even those, when the paroxysms were most severe, he felt a keen desire for food; but though, in satisfying that desire, his pain seemed to be somewhat relieved, yet it afterwards returned with increased severity; his digestion was irregular, being sometimes costive, at other times affected with diarrhœa; the alvine discharges being always acrid, and discoloured; he was subject to eructations, either acrid or acid, attended with flatulence in his stomach and bowels; urine in general copious, and limpid; often so acrid as to excite sudden micturition.

Prescribed—Strict attention to diet, and selection of those articles found to agree best with the stomach and bowels; patient mastication of his food; and as the use of animal food, to take it rather in the morning for breakfast, than at a late dinner; to avoid the unequal temperatures of his factory and warehouse. And having previously employed a solution of tartar emetic, so as to excite nausea and vomiting, to commence the daily use of pills of tartar emetic, compound colycinth pill, and assafœtida, to free his bowels; and at night to employ pills of the extracts of hyoscyamus, cicuta, and opium, so as to promote rest.

The vomiting caused the discharge of much acrid greenish matter from the stomach; and the pills excited copious malænous offensive stools; the anodyne pills caused quiet rest; and there has been no return of *tic dolo-reux* since.

For some weeks subsequently, the sulphate of quina was employed as a tonic; and though in the course of the last summer he was attacked with a severe nervous Fever, in which I attended him; there has subsequently been no return of *tic dolo-reux*.

The nature of *tic dolo-reux* connected with the first impression made on the functions of digestion.

I have introduced these cases of *tic dolo-reux*, under the head of intermittent Fevers of the past year, because the production of these different forms of disease, appeared to me to be alike influenced by malaria, as their chief exciting cause; and as their natures were very similar, I treated them also in nearly a similar manner. In both ague and intermittent neuralgia, I believe the first impression of the exciting cause to be made on the gastric juices; and that the disordered function of digestion, and the consequent morbid condition of the chyle, and of the other contents of the stomach, whether ultimately absorbed, and carried into the sanguiferous system, or carried downwards by the primæ viæ, become in their transit, a chief source of all the succeeding symptoms; the diurnal revolutions of those symptoms, probably depending upon the habitual revolutions in the functions of digestion, produced by the custom of taking food at particular hours of the day. When these period-

ical diseases, however, become more established, it is probable, not only that the fluids are further affected, but that consequent changes are excited, in the texture of the vessels of the chyliferous, sanguiferous, or lymphatic systems, or even in the nerves themselves; and hence, the morbid condition of the fluids, may be *the primary source of organic disease*.*

On these principles perhaps, the efficacy of emetics, both in shortening the paroxysm of intermittent Fever or neuralgia, or in preparing for the successful exhibition of the different preparations of Peruvian bark, may be satisfactorily accounted for; and the same may be said with respect to the advantages which are sometimes derived from anodynes, previous to the exhibition of the bark; for, in such cases, the acrimony of the gastric juices, as will sometimes happen from mere dilution from warm water, may be so far obviated as not to excite morbid actions on the extremities, either of the vessels or the nerves.

With respect to the sudden absorption of chronic tumours, which have been noticed to occur in the paroxysms of intermittents; or, the sudden tumefaction of some of the viscera, particularly of the liver and spleen, which more generally happens, in the intervals; either of them appears to me to be best accounted for by the di-

Modus operandi of emetics and of anodynes.

Causes of the sudden absorption of tumours in the paroxysms, and also of their re-appearance in the sequel.

* See Appendix, Note 2.

rect influence of the fluids carried to the various parts so affected. For in first the case, the removal of the tumours bears analogy to the effects of mercury, artificially employed for a similar purpose; and in the second case, tumefaction of viscera or other parts, which suddenly occur in the intervals, or in states of great debility, dissections after death seem to show how much they are connected with an accumulation or *error loci* of the fluids; which thereby distend and sometimes disorganise the vessels; in the manner demonstrated in the dissection of the female, who died in the Cork-street Hospital, in December last, of the prevailing epidemic form of typhus Fever; or still more clearly in these dissections narrated, of the two horses that died in the months of November and December last; and in both of which the hepatization of the lungs, and other marks of disorganization, were manifestly the result of the accumulation of the blood, morbidly changed. See pages 70, 71, 72. Also pages 153, 154.

Of ganglionic
excrescences.

As to those excrescences or enlargements of the ganglions, which have been stated to be frequently found connected with parts affected by neuralgia, I am inclined to think they arise from accidental causes, inasmuch as they are not found to occur in many other cases, which have been attended with similar symptoms. That ganglionic disease of the nerves is a frequent consequence of the morbid ingesta into the stomach, there can, I think, be no doubt. This may be well illustrated by a comparison be-

tween the appearances of the ganglionic system, found by Dr. Kerner, in the dissection of the bodies of those who died in consequence of using certain unwholesome animal substances, as articles of diet;* and those by Dr. Robert Reid, when examining the bodies of those who died of typhus Fever supervening on starvation, in the epidemic of Ireland, in the years 1817-18-19.†

EXANTHEMATA.

As many of the most important of the febrile diseases, arranged by nosologists under the head of the exanthemata, or eruptive diseases, have been epidemic in the course of the past year, it is necessary to notice them on the present occasion. I shall, however, confine my remarks on each species, chiefly to the forms, which these species and their varieties assumed, under the prevailing epidemic constitution of the time, in order to illustrate the principles and practice, which I have adopted and recommended with respect to them. When treating on the pathology of our common continued Fevers, I have stated the reasons which led me to suppose that of late years they have generally had a tendency to a typhoid character; and the same reasoning appears to me to be applicable to the exanthema-

Many of the exanthemata have been epidemic in the past year.

* See “Nouvelles Observations sur les empcisenmens mortels, qui arrivent si souvent dans les Wirtemberg, par l’usage les boudens fumés.”—Par le Dr. Kerner, Tubingue, 1820.

† See my Report from the Cork-street Hospital, for the years 1820 and 1821, pp. 42 to 45, inclusive.

ta, which also have been epidemic at certain periods of the past year, an opinion which I shall illustrate by cases of *measles* and *small-pox*, and refer, with respect to *erysipelas*, and other of the exanthemata prevalent, to the reports, I have already published, of former years.

MEASLES.

Measles prevalent.

Measles prevailed very generally during the months of January, March, April, May, and June, in the past year; and in many of the cases I met with, both in hospital and private practice, it was obstinate and severe, during the different stages; but, in every case, the applicability of bleeding in the eruptive stage, appeared to me to be the paramount question, both in importance and difficulty. Peculiar circumstances, particularly in my own family, my four youngest children, having been severely attacked with measles, led me to look for all the instruction I could acquire; and I can perhaps best impart that instruction to others, by giving a brief history of the urgent cases placed under my care, from the month of February, when measles began to prevail, until the month of June, when it in a great measure ceased; a period, which embraces the two months of my Hospital attendance, in the course of which measles most prevailed.

The question of blood-letting in the eruptive stage most important.

Two such cases of measles occurred in brothers, resembling each other remarkably, both in external appearance and constitutional vigour.

The first was that of Mr. Charles ———, aged 22, a student of the Temple; the second, that of Mr. John ———, aged 21, also a law-student in an attorney's office. Both were reared together at their father's country residence, at a considerable distance from Dublin, where they resided, except during the law terms. This similarity in all the accompanying circumstances, is stated, in order to show how precisely the same symptoms in both were influenced by a different mode of treatment, as respects blood-letting in particular.

I saw the elder of these two young gentlemen, early on the 11th of February, 1828, the 5th day from the commencement of his illness, which set in with rigors, succeeded by considerable pulmonary affection, particularly a hoarse and dry cough; and on the day preceding my visit, soreness and swelling of the internal fauces, with considerable epiphora supervened. At the same time, an eruption appeared, evidently of the measly kind. In the course of the night, the breathing was so hurried, and accompanied by such high Fever, that it was deemed advisable by his medical attendant to bleed him largely from the arm, without, however, giving the expected relief; and subsequently, before I saw him a blister was laid on between the shoulders. I found the breathing still hurried, the cough frequent, and the Fever high; the pulse being 130; the skin hot; and the tongue loaded and brown. He complained much of debility, and soreness of throat, accompanied with difficulty of swallowing. The eruption, which had receded soon after the bleeding, was now beginning to re-appear; the bowels had been copiously freed. Under these circumstances, I did

not deem it advisable to prescribe more than warm drinks; an emollient gargle for the throat, and a rubefacient liniment, to be rubbed over the external fauces.

FEB. 12th—Passed a restless night, and Fever still very high; the eruption fully out; but on the neck, breast, and arms, is interspersed with petechiæ; complains of extreme debility; respiration less hurried, but still oppressed; cough frequent; the soreness of throat, and difficulty of swallowing not abated. In addition to the means directed the day before, an expectorant mixture, with hippo, and compound spirit of ammonia, was prescribed; and a warm plaster directed to be applied between the shoulders, and a small quantity of wine, largely diluted with water, whenever the sense of debility was urgent. For a day or two, both the febrile and pulmonary affections gradually subsided; but then they returned, the former with increased urgency, assuming still more decidedly a typhoid character; the sickness and oppression at the stomach was, however, chiefly complained of; and an emetic of tartarised antimony and hippo, was prescribed; and an injection, if necessary, three hours afterwards. During the continuance of the Fever for the next six days, moderate aperients were chiefly relied on to moderate it; and on one occasion, when both the febrile affections, mutually influencing each other; tartarized antimony in solution, so as to excite nausea, and ultimately vomiting, was found decidedly beneficial; the strength at the same time was supported by cooling fruit, light broth, whey, and sometimes a little wine, largely diluted with water.

After convalescence, strength returned very slowly, so that the month of March was far advanced, before he was able to resume his accustomed studies in college.

Mr. John ——— was attacked with Fever on the 22d of February; and on the 24th, the eruption began to appear accompanied with very high Fever, hurried respiration, frequent hard cough, soreness of throat, and difficulty of swallowing, and in every other circumstance, except the recession of the eruption, and the subsequent appearance of petechiæ, was similarly affected with his brother. His treatment consisted in an emetic of Ipecacuanh and tartarised antimony, on my first visit; moderate opening of the bowels; mucilaginous expectorants; a blister behind the shoulders, applied on the 26th, when a high degree of Fever, and a considerable increase of the pulmonary affection made it necessary. On the 1st of March he was coalescent, and in a few days afterwards he was able to return to his office.

In the commencement of April, my youngest daughter was attacked with measles; and at the beginning of the eruptive stage, cough, difficulty of breathing, a sense of tightness, and soreness of the throat, accompanied by a very high degree of Fever, demanded the most vigilant attention; and during the eruptive stage, the question of the necessity, or of the danger of bleeding, was necessarily before me. In proportion, however, as the eruption came out freely, relief was observed to follow; and though the influence of the epidemic constitution was evinced by the debility that attended, before and after convalescence; yet a favourable crisis was apparent on the completion of the eruption, and there was afterwards no return of the pulmonary affection.

With my three other children, who were successively attacked with similar symptoms, I therefore pursued a similar plan, and relied in the highest stage of febrile excitement on nauseating doses of tartarised antimony; and for the relief of the pulmonary affection, I trusted

to demulcent expectorants, assisted by rubefacients, or blisters applied to the part of the chest chiefly affected. In none of these instances had I to regret that I did not employ bleeding in the febrile excitement of the eruptive stage. I should, however, add, that in the sequel of the case of my youngest boy, seven years old, cough and other symptoms of an affection of the lungs, more than once led me to consider the propriety of using the lancet; but in this instance, too, the appearance of a general rash of an acrid nature, being followed by relief of the internal affection, I deemed it better to trust to the employment of remedies, indicated by that acrimony of the fluids alone: an acrimony, which was a frequent sequel of measles, during the continuance of the north-east winds, which prevailed at that time.* I, however, seldom hesitated to take blood freely in the sequel of measles, proportioned to any inflammatory symptom, that appeared; from finding that the blood was generally buffed under such circumstances, and that relief followed the abstraction of it.

Nine cases of measles, three of males, and six of females, passed under my care at the Hospital, in the months of April and May last.

In those cases, I had little opportunity of judging of the propriety or necessity of bleeding in the eruptive stage; because in all, but three, the eruption was fully out, unattended by any great distress or pectoral affection; or was beginning to decline. In one case only, that of Catherine Swords, a strong young woman, who came in at the commencement of the eruptive stage, was there such urgency of the pectoral affection, as appeared to me to re-

* See Meteorological Tables.

quire venesection, and with whom alone I therefore employed it. On her admission, the 22d of April, before any eruption had appeared, an emetic of tartarised antimony had been prescribed to moderate the Fever; and this having freed the bowels also, no other remedy seemed necessary until the 24th of that month, when the urgency of the pectoral symptoms, induced me to direct bleeding from the arm to the extent of ten ounces; the blood drawn was neither buffed, nor firmly coagulated, but was dark and fluid, with very little serum separated from it. The operation, however, gave considerable relief at the time; and, in the course of the evening afterwards, the eruption of the measles appeared, and along with it, the catamenia, several days before the expected period. This irregular appearance of the catamenia, as generally happens in febrile diseases, was attended with great debility; and on the succeeding day, a petechial eruption on the upper part of the chest and shoulders, was more distinctly observable than that of the measles, which since its first appearance, was of a fainter colour than usual. The symptoms of measles now merged into those of typhoid Fever; and hence, it is not necessary here to detail the subsequent symptoms and treatment further, than that those symptoms were urgent for several days before a favourable crisis took place, and that the treatment was the same which may be found detailed in the cases given of typhus gravior.

In two cases, however, of the sequels of measles, one a male, and the other a female, I found it necessary to direct bleeding repeatedly for the relief of pulmonary affections, such as from the pernicious effects of the prevailing north-east winds, were then often to be met with. In all such cases, the blood was deep-

Blood drawn
in the sequel of
measles buffed.

ly and densely buffed, and the operation in general gave relief; relief, however, which was promoted by the exhibition of nauseating doses of the solution of tartar emetic, in aid of other more cordial expectorants, and of sudorifics, particularly preparations of nitre and ipecacuanh, and of ammonia. The recovery of these patients from the sequelæ of measles, was slow, but ultimately complete.

In the months of August and September, though there were several cases of scarlet Fever, yet, but three cases of measles occurred in the wards of the Hospital under my care; but one of these only demands any particular observation, that was the case of Catherine M'Vey, admitted on the 13th of August, who had been 8 days previously ill of measles, during which time she had been twice copiously bled. The eruption had disappeared without desquamation; the countenance, particularly the eyes, was dull; and the skin of a leucophlegmatic colour; the pulse was quick, and small; the tongue white and loaded; there was considerable increase of Fever, both in the fore and afternoon; the bowels were irregular; urine scanty, and crude; there was considerable prostration of strength and weakness of voice; sleep uneasy, with low muttering; and complained of general uneasiness in her chest, without being able to refer it to any part. The treatment in this case being very similar to that of the sequel of measles, just detailed, it is unnecessary to mention farther, than that in the succeeding six weeks which this patient remained at the Hospital, the pectoral affection twice arose to such a degree, as to demand bleeding from the arm, aided by leeches applied to the affected part; that the blood was buffed; and that though horehound and iceland moss, and for a few days, sul-

phate of quina, were employed, after the febrile exacerbations had been moderated by such evacuations, and by digitalis; yet, debility to a considerable extent remained, on her dismissal from the Hospital. She was afterwards removed to country air, under the advantages of which, her recovery, I learned, though slow, was ultimately complete.

I shall now conclude these illustrations of ^{Cases in private practice.} rubeola, as it prevailed in the spring of last year, with the following cases which occurred to me in private practice.

About 11 o'clock at night, may the 5th, 1828,* I was called on to visit Miss S. H——, at Rathmines, where she had been removed a few days before, labouring under severe consequences of measles, the first attack of which had commenced about three weeks before at her town residence, near Merrion-square. I now learned also, that she was six years and seven months old; and that, except an abscess of the internal ear, which afterwards partially affected her hearing, she had previously enjoyed good health. That her recovery from the measles, though slow, had been progressive until the last two days, when the Physician and Surgeon General were again called on to assist Dr. Marsh, who had visited daily from the third or fourth day of the disease; and the symptoms fully accorded with the hopeless opinion, stated to me to have been given by these gentlemen a few hours before. Total prostration of strength; great emaciation; rapid and irregular respiration, being often double, and sonorous; the sound resembling those "rattles," as they are vulgarly called, which so frequently precede death;

* See Meteorological Tables.

the eye-lids and mouth lying open, and relaxed; and the nostrils distended, further marked extreme debility; whilst the other features collapsed and palid (excepting the left cheek, which was occupied by a circumscribed livid flush) presented the *facies hippocratica*, in an exquisite degree; cough, frequent and dry; no pulsation to be felt at the wrist, whilst that of the heart was so extensive as to be felt externally not only over the left side of the chest, but also considerably to the right side of the sternum, and at the epigastrium; skin hot and dry; hands and feet of good colour. When a little wine and water was poured into the mouth, it had a sudden and remarkable effect in restoring vital power, and the coma and exhaustion, which seemed the harbinger of dissolution were considerably relieved; she swallowed and repeated the draught with increased ease and avidity; the respiration became less hurried and more regular, and the pulse at the wrist was soon after restored, so that it could be counted, and I thought I could distinctly reckon it at 168. She now, with considerable strength of voice and clearness of intellect, said she was better, and was free from pain. Under these circumstances, I requested that the Physicians in attendance might be convened as speedily as possible, and in the mean time, besides the cordial draughts in use I prescribed the following medicines:

R̄ *Decocti senekæ. Aquæ puræ āā unc. iij. Spiritus ammon. aromatice, drachmas i. Vini ipecachuanæ dr. ij. Syrupi limonum unc. i. M. Capiat coch. amplum tertiis horis.*

R̄ *Olei terebinth. Olei ammoniati āā unc. i. Fiat linimentum, spinæ dorsī, lateribus et sterno, applicandum. Postea vesicatorium sterno.*

R̄ *Enematis comm unc. viij. Olei terebinth. unc. ss. Tinct. assafœtid. dr. i. Fiat enema post horum unam injiciendum.*

MAY 6th, 8 o'clock A. M.—Three hours quiet sleep during the night, and general appearance of the patient much improved; the respiration, however, still quick, and the pulse 140 in the minute. The Surgeon-General, accompanied by Dr. Marsh, arrived in about half an hour afterwards, and the latter, having examined the chest by the stethoscope, gave a very unfavourable report of the condition of the lungs in general. With my hand alone, indeed, applied successively over the different parts of the chest, I could, from being accustomed to such a mode of examination, clearly distinguish the difficult transmission of air through the lungs, and still more remarkably, the general palpitation of the heart, as already described. The child, however, answered with confidence and a strong voice, and said she was better; the enema operated well, and the blister caused full vesication, which I learned did not happen with those previously applied. I now also learned from Dr. Marsh, who was in attendance from the third or fourth day, that this young lady had been once or twice bled, subsequently to the first appearance of the eruption of the measles.

In addition to the seneka mixture I had prescribed the night before, two pills were directed, each containing two grains of blue pill and one of calomel; one to be taken immediately and the other in two hours afterwards.

Four o'clock P. M.—On the same day, Dr. Cheyne met the rest of us, who had assembled in the morning, and we did not find the patient was in any respect improved; external appearance, indeed, and animation were not so well. The stethoscopic report was still more unfavourable, and was stated to indicate great disorganization and hepatization of the lungs; the breathing was rapid and sonorous; the pulse quick and

small; and, excepting the child's answering still with a sound voice and clear intellect, the swallowing remaining perfect, and the hands and feet retaining their warmth and colour, little remained to justify hope from the use or continuance of any remedy; and this prevented me proposing what I had previously intended.

The inhalation of steam, slightly impregnated with æther and the following form of the seneka mixture was then agreed upon, in addition to ass's milk, wine and water, and chicken broth, previously in use :

Rx Decocti Senekæ. Aquæ puræ āū unc. iij. Spirit. amm. arom. gut. xij. Syrupi simplicis dr. ij. M. Capiat coch. amplum alternis horis.

MAY 6th, 10 o'clock, P.M.—In consultation with Dr. Marsh: the symptoms appear to me to be stationary since mid-day. The alvine and renal discharges scanty.

Rx. Decocti hordei, unc. viij. Olei ricini, dr. iij. Spirit Terebinth. dr. i. ss. Tinct. Assefætid. dr. i. fiat enema statim injiciendum. Mitte duo talia. Mitte Spiritus cornu, cervi, dr. i. Applicetur emplastrum calidum inter scapulas.

MAY 7th, 8 A.M. met Dr. Marsh—The patient got some rest in the night, though some griping pain was felt from scanty alvine discharges. The report from the stethoscope and other symptoms, very little changed.

Rx. Infusi rhei, dr. iv. Magnes. ustæ. gr. iv. Vini rhei dr. i. Fiat haustus (phialâ agitatâ) statim sumendus.

Rx Decocti lichen. Island. unc. v. Syripi ouranti. unc. i. M. Capiat coch. ij. ampla quartis horis.

Three o'clock P.M.—Met the Surgeon-Ge-

neral and Dr. Marsh; we found little or no change in the general symptoms, respiration quick, irregular and sonorous; pulse 140; report from the stethoscope most unfavourable.*

R_x. Piutæ hydrargyr. gr. iij. Pulv. digitalis, gr. ij. Pulv. Zingiberis, gr. i. Fiant Pil. vi. capiat unam statim et alteram, tertiâ quâque horâ.

R_x. Aquæ distillat. dr. ij. Mist. Camphor. dr. ij. Spir. Ammon. Arom. gutt v. Syrupi Aurant. dr. i. M. Fiat haustus, secundis horis sumendus. Mitte tres tales.

MAY 7th, 10 o'clock, P.M.—Dr. Marsh and I met, and found no improvement in the symptoms; but, on the contrary, restlessness and moaning, during the short intervals of imperfect sleep were much increased, and the report of the stethoscope contributed still farther to despair. Feet still, however, warm, and of a good colour; and when the patient was roused,

* I regret that my notes of this case do not enable me to give the reports from auscultation more precisely; but from having always considered those sounds which indicate difficulty in the transmission of air through the lungs, to be fallacious during the acute stages of rubeolous disease, and liable to lead to confusion, I merely noted them in the general terms expressed above. The temporary stricture on the membranous linings of the cavity of the chest, and of the air vessels themselves, or the tardy motion of sily blood through the minute branches of the blood vessels, which, I believe, often leads ultimately to disorganization and hepatization of the lungs, merely, if judged of by the stethoscope, are liable to be mistaken for actual disorganization, because I have known such mistakes to happen; and the origin of such mistakes may be seen illustrated in the cases of dissections of horses, which I have given to show the nature of the symptoms of that epidemic disease produced in those animals by the prevailing epidemic constitution.^a

^a See also the cases given at Note 2, in the Appendix, in evidence of organic diseases commencing in the morbid condition of the blood.

she swallowed well, and spoke strongly, and coherently.*

Rx. Pulv. Doveri, gr. iij. Sacch. Albi, gr. vi. M. et div. in chartulas tres, caput unam quartis horis.

MAY 8th—At four o'clock, A.M. it appeared to the attendants that the child was dead; and notice was sent to me to that effect: but at 11, A.M. I received an urgent message to visit; and I soon after found the little patient not only alive, but with more animation than she had shown for the last twenty-four hours. She called for drink, and took it freely. Fever, however, was very high, and indicated very strong re-action; the face was flushed; skin hot; pulse strong and quick, and she complained of severe pain in the centre of the forehead. Having requested the other medical attendants to be immediately convened, I directed the warm drinks to be continued, the feet to be fomented, and an enema to be administered.

MAY 8th, 2 o'clock, P.M.—Fever still very high; and besides the symptoms detailed in the

* I have noticed the warmth and colour of the extremities a symptom which I deem it of great moment to attend to in diseases of children, accompanied with extreme danger, because that so long as this lasts, whatever other symptoms may exist, the progress of death seldom advances so far, that it might not yet be arrested. A fatal case of a young gentleman, who was attacked with measles, while labouring under well-marked symptoms of tubercular phthisis, and whom I attended in consultation with Dr. Litton, and Surgeon Halahan, at the same period of this young lady's illness, confirmed still farther the justness of the foregoing observation. His urgent symptoms were laborious doubled respiration; bronchial crepitus; intermitting feeble pulse at the wrist; violent palpitation of the heart, felt as generally over the chest, as was stated to be in the other case, extreme prostration of strength, but clammy cold sweats on the extremities, and lividity particularly of the nails of the toes and fingers, preceding death by more than forty-eight hours.

last Report, there was slight strabismus, and some delirium. Being again disappointed of meeting the physicians in attendance, as I was previously led to expect; after three-quarters of an hour fruitless expectation, I directed a leech to be applied to the margin of the nostrils, and a blister to the occiput, and to the medial margins of the scapulæ, shaped so as to avoid that part of the neck that had been previously blistered; and besides the fomentations and diluent drinks already in use, I prescribed the following aperient mixture, and enemata, the bowels not being sufficiently free.

Rx. Olei Ricini, unc. i. Conf. Amygdal. q. s. Aquæ puræ, unc. iiij. M. capiat coch. mediâ ij omni horâ ad alvi solutionem (ph. ag.) Mitte enemata duo cathartica.

MAY 8th, 9 o'clock, P.M.—Great improvement in every respect; the bowels having been freely acted on by the medicines, and the blister having risen well, the flushing of the face, and strabismus have also ceased, notwithstanding that the discharge of blood from the orifice by the leech was, from accidental circumstances, very inconsiderable. Being again disappointed of the aid which I was promised at this hour, from consultation with the other medical attendants, no alteration was made in my prescription at mid-day.

MAY 9th, nine o'clock, A.M.—The Surgeon-General and Dr. Marsh met me, when every symptom appeared decidedly improved. The patient reclined with considerable ease on either side, and had passed a tranquil night; the report of the stethoscope too, was very favourable; and the condition of several parts of the lungs was stated to have been entirely changed from that of the day before; the pulse and respiration, however, were easily hurried, and the

countenance expressed much nervous sensitiveness; the expectoration was scanty, but mucous; and the cardiac pulsation was felt as generally over every part of the chest.

Rx. Pulv. Ipecacu. Pulv. Calomel, āā gr. ij. Sacch. albi, dr. ss. M. et div. in partes viij. capiat unam sextis horis. Habeat misturam cum decocto lichenis islandici.

It was with no inconsiderable anxiety, that, shortly after the consultation, I was now informed by Dr. Marsh, that by the arrangement of this young lady's parent, just made with him, I was to undertake the attendance alone—a proposition which had been frequently pressed on me before, owing to the difficulty of assembling the other Physicians at that distance from town: but though I was greatly gratified in the opinion of Mr. Crampton, that the case was now going on so promisingly, that further consultations might not be necessary; yet I felt that the responsibility attached to it, was much greater than I would willingly undertake.

It is unnecessary to protract the sequel of this case by minute detail. During the four succeeding days, notwithstanding the pernicious influence of the north-east winds, which then prevailed;* there was still daily progressive improvement, and the nights were passed in quiet sleep; the cough and hurried respiration gradually diminished, and appetite returned; there was, however, great nervous sensitiveness; the pulse in the morning rarely under 120, and in the evenings, especially of every second day, it arose to 136 or 140. This alternation on every second day in the state of the symptoms, was remarkable in the various cases of measles which I attended at that time. On the morning of the 12th of May, the patient having passed

* See Meteorological Table prefixed to this Report.

a restless night, owing to frequent griping, and grass-green alvine discharges, a lumbricus of a large size was ejected by vomiting, and expectoration of mucus succeeded, which was also discharged downwards. Together with these symptoms, whey-like urine, picking of the nose, grinding of the teeth in sleep, all further evinced that the effects of worms, as well as bilious Fever, were now complicated with the primary catarrhal affection. The bed-chamber was now graduated to a fixed temperature between 59° and 61° . To promote expectoration, or to moderate Fever, small doses of hippo, digitalis and nitre, were occasionally given; and with a view to the symptoms of worms, small doses of calomel, alternated with turpentine, were also prescribed; gum plasters, were applied to the chest and *scrobiculus cordis*, at the right side of which she sometimes felt pain; and where also a slight enlargement of the liver could be discovered. This part was bathed twice a day with *aqua chlorinii*; and, as the appetite improved, jellies, fruits, and tender vegetables were allowed in addition to the preparations of milk and iceland moss. Under this plan, recovery went on progressively until the 17th, when, in the early part of the day, the weather being remarkably fine, and the patients strength and spirits considerably restored; she was indulged in an anxious wish to be removed to the next room, the air of which had been previously brought to the same temperature with the bed-chamber; but unfortunately, the wind which had ceased from the north-east point in the morning, suddenly returned, and brought on a severe renewal of all the catarrhal affection; symptoms, however, which were again relieved by a blister to the epigastrium, and small doses of James's Powder. The appetite was good, and the strength again improved; but the symptoms of worms still continued urgent, and morbid sensibility seemed to be increased.

On the morning of the 20th, the symptoms of worms already detailed above, alone remained urgent; the spirits and appetite were good; and healthy digestion was marked by natural alvine discharges; respiration regular, unless after making exertion, to which she was much inclined; the cough was much less frequent, and a mucous discharge from the stomach, such as that in children affected with worms, took place.

On the morning of the 21st of May, the mucous expectoration observed the day before, increased considerably, and ultimately, it was vomited up in large quantities from the stomach; the countenance at the same time became pale and languid, and the pulse for the first time sunk below 100, and was feeble; respiration natural, and no cough, except that which preceded the vomiting; the clysters lately administered had very little effect; and the discharges from the intestines have been scanty; and consisted chiefly of mucus, tinged with blood; considerable pain was felt over the hypogastrium and perineum, attended with obstinate *tenesmus*. For the relief of those symptoms, emulcents, with castor oil and saline aperients, were administered alternately with mercurial powders; also a small blister applied under the umbilicus, together with fomentation and friction of other parts of the abdomen; but all to little purpose; and on the morning of the 22d, though after a quiet night, with some hours sleep, the rapid advance of extreme debility was obvious; the countenance became pale, and the voice weak; pulse very feeble and indistinct, but not quicker than natural; no discharge from the bowels had taken place, except a small quantity of mucus from the rectum, mixed with the remains of dissolved worms; but otherwise resembling that which was now copiously ejected from the stomach. About 9 o'clock, A.M., death closed the scene.

MAY 24th.—Post mortem examination 48 hours after death, made by the Surgeon-General, assisted by Dr. Marsh and myself.

Slight and recent adhesions between the pleura pulmonalis and pleura costalis; colourless gelatinous effusion on the pleura pulmonalis, chiefly the lower parts of the right and left lobes, but more on the right than the left; from six to eight ounces of serous effusion into the cavities of the chest, and about two ounces into the pericardium. The mucus membrane trachea and tubes covered with purulent matter, which exuded from the cells on making a section of the lungs, and making pressure. The disease was much more strongly developed in the right than in the left lung, which, in particular was loaded with purulent matter, and was easily lacerable. The abdominal viscera were sound; but there was in the ilium an intussusceptio of about three inches in extent. A purulent-like fluid, mixed with the fluid contents of the stomach, escaped on dividing the œsophagus. No portion of the lung was hepaticized. The disease seemed to be confined to the mucus membrane of the air-tubes and cells.

H. M.

W. S.

P. C.

From the great proportion of the thoracic viscera, totally free from any traces of ^{organic} disease, and from the slightness of these traces, where found, as well as from my recollection of the previous history of the case, I am of opinion, that the volvulus contributed to immediate death in this instance—an opinion which subsequent reflection has further confirmed; and I shall only add, another fact in favour of the justness of that opinion, as it respects the immediate cause of death in this and similar cases of debility, viz :

On the 4th of September last I was called, in consultation with Dr. Aston, of Meath-street, to visit Master —, a child of eighteen months old, who had been labouring from the preceding day, under well-marked symptoms of cyananche tracheales, in its most urgent degree, and on the succeeding day, the extreme difficulty of breathing—the head being drawn back, so as to assist inspiration—increased to such a pitch, that a consultation was held with Mr. Wilmot, to consider the propriety of making an artificial opening into the trachea; but as, shortly previous to that consultation, the breathing had become easier, while the symptoms of extreme debility increased, the operation was declined. The increasing ease of breathing, and at the same time the increasing debility continued subsequently until death, which took place about eight hours afterwards. In order more clearly to understand the result of the examination which took place after death, it is necessary to state, that about a week previous to the commencement of the croup in this child, whilst he was drinking from a china cup, a small portion of it broke off under the pressure of his teeth, and passed into the upper part of the œsophagus, from which it was dislodged with some difficulty, and was followed by some hæmorrhage. And it should be further observed, that constipation of the bowels, too, commenced at the same time that the partial relief of the breathing and the extreme debility were remarked together, and that general convulsions preceded death.

Sectio Cadaveris the day after death.

On laying open the trachea, the adventitious membrane, peculiar to croup, was perfectly formed, but was loose in its texture, and partially broken down, and dissolved; so that a free opening for the transmission of air through it, had taken place. As this appearance could

not account for the cause of death, we proceeded to examine the neighbouring parts; and on opening the œsophagus, we discovered posteriorly, and just below the pharynx, the remains of a cyst which had been ruptured, and from which a considerable quantity of purulent matter was diffused into the adjacent cellular membranes. This small abscess, evidently the consequence of the injury done by the fragment of china, which got into the œsophagus, in the manner stated, might also be deemed insufficient to account for death in the manner it took place in this instance; and pursuing the inquiry through the thoracic and abdominal viscera, although the appearances indicated future disease, yet nothing occurred to satisfy us with respect to the object on which we were immediately engaged, until we reached the intestinal canal, where, particularly in the small intestines, volvuli to a great extent had taken place, and which, though unaccompanied with adhesive inflammation, probably owing to the antiphlogistic treatment that had been employed, yet appeared to me to account for the symptoms immediately preceding death, as well as the suddenness of the event itself.

I intended to have detailed some other cases of measles, particularly that of the sister of the young lady, whose case has just now been stated; but as it was similar in all other respects, besides the fatal termination; and having already exceeded the space designed in this report in the account of measles, I must here conclude; and shall proceed briefly to notice small-pox, which was also epidemic in the past year.

Conclusion of
the remarks on
rubeola.

SMALL-POX.

As in treating of the other diseases, epidemic in the past year, as well as typhus Fever,

Practical observations.

Confined to illustrations of the author's observations, formerly published.

I was necessarily confined by the nature of this Report, to practical observations on the cases which were placed under my care ; so in this instance, too, I intend that those cases which afford elucidation of my observations on the varioloid disease, or on small-pox, under the form which it presents in those, previously vaccinated, shall alone be selected for particular remark ; premising, however, that natural small-pox was generally severe, and frequently fatal in those adults who had not previously been either vaccinated or inoculated with the small-pox. In those vaccinated a certain degree of the immunity given by the antidote, might in most instances be recognised at some stage of the disease ; but most remarkably so from the 8th to the 10th day, when the secondary Fever, might have been expected to have succeeded the confluent forms which this disease sometimes assumed.

Further evidence of the varioloid disease not needed.

Since the publication of Dr. J. Thompson's Historical Sketch of the opinions entertained by medical men respecting the varieties and secondary recurrence of small-pox ;* further arguments are needless to prove that small-pox does in many instances occur in persons who had been vaccinated, though in most of those instances, so modified as to be confounded, as it had been with varicella or chicken-pox. Other-

* See Medical Sketch of the opinions, &c. respecting the varieties, and the secondary recurrence of the small-pox. By John Thompson, M.D. F.R.S E. London, 1822.

wise, I might detail very satisfactory evidence indeed, of small-pox having extended by its proper contagion through numerous families, who had been previously vaccinated, and who had been deemed by eminent practitioners, quite secure from the danger of any such attack. In one of these families, in particular, I had been very intimate from the birth of the children, till they arrived at adult age, in 1827, when all, six in number, were successively attacked with the varioloid disease. I had visited them in all the diseases incidental to children, and was called on to witness the regular progress of the arcola after vaccination, so that I was able to add my testimony to that of the several respectable medical practitioners, who had vaccinated them; yet the successive attacks of the eruptive Fever of the small-pox were in all until the seventh or ninth day, apparently as severe, as if no such immunity had been given; and in one of them, a young lady of seventeen years of age, the pustules were confluent, and succeeded by secondary Fever, which for many days had an alarming aspect, and was of doubtful issue. The sequel, too, marked the virulency of the preceding disease; for, not only considerable pitting over the face and bosom, after the desquamation of the cuticle, but also considerable delicacy both of the pulmonary and hepatic systems succeeded, and which only disappeared in the course of last summer. The

The progress of small-pox after vaccination through numerous families.

In some cases pitting left after desquamation.

† See my Observations on Varioloid Disease, &c. Dublin, 1821.

pitting too has become less perceptible; so that it can now be discovered only on close examination. A similar pitting followed a similar attack in another young lady of the same age, whom I attended in the past year; she was remarkable, too, for the same delicacy of complexion: in this instance also, the marks of pitting are becoming gradually more faint, and probably will totally disappear.

Six cases of small-pox that occurred in the wards under my care in April and May.

Of the six cases which were admitted with small-pox into the wards of the Hospital under my care, in the months of April and May, when the disease was most prevalent, four were females and two males: three of the females had been vaccinated, and the other inoculated with the small-pox; but neither of the males were provided with any such protection. All had arrived at adult age; but that of the eldest, did not exceed thirty years. In three of the four females, the eruptive stage was severe, and of these three, she who had been inoculated with the small-pox, had the disease most severely until the ninth day; and in these three, the eruption was ultimately confluent, and pustular; so much so, that I deemed it advisable to puncture several of the largest pustules, in order to moderate the disease, as recommended by Tissot and Burserius; a practice that, in many instances of the worst forms of small-pox, I have found highly beneficial, both in moderating existing Fever, and preventing secondary Fever. In all these females, however, a remarkable decline of

Puncture of the largest pustules, found to moderate fever.

the symptoms was observed on the 9th day, and no pitting remained after desquamation.

The course of disease in the two men, appeared to me to afford an instructive illustration of an opinion I ventured to express, both in my observations on the varioloid disease, in 1821, and subsequently in my letter to Dr. Thompson, viz. that the contagion from small-pox, after vaccination, as well as its infection by the introduction of matter, is followed by a modified disease in persons not previously vaccinated or inoculated with small-pox.* For in one of these unprotected persons, the eruption was confluent, and both the primary and secondary Fever alarmingly severe; the sequela, too, was protracted, and recovery from it long doubtful; whilst in the case of the other, who was by some years the elder of the two, the eruption, though pustular, was not confluent; and on the ninth day, a decline in the symptoms took place, as remarkable as in the cases of the females adverted to, who had been previously vaccinated.

The contagion or eruption from varioloid disease produced a modified disease.

I would willingly dwell longer on this deeply interesting subject; but it has already occupied nearly as much of this Report, as I feel warranted in devoting to it. The two following cases, however, which I saw, in consul-

Conclusion of observation in small-pox.

* See my Observations on the Varioloid Disease, &c. pages 16, 17. *Dublin*, 1821.

tation with Surgeon Collis, of York-street, appeared to me so instructive in many points of view, that I hope a brief report of them may be allowed.

Two young gentlemen, both members of the University, one a student of medicine, the other of divinity; both of whom had arrived at the 21st year of their age, resided in the same family, and in infancy, both had been vaccinated by eminent practitioners. Mr. B. D. the medical student, felt the commencement of his attack on the 11th of April, 1828, five days after he had been engaged at the Hospital, in the examination of the body of a man, who died of a very malignant form of confluent small-pox, and who, in the full confidence in the antidotal efficacy of vaccination which he enjoyed, stated, that he would not hesitate to inoculate himself with the matter from the dead body, if the experiment was deemed necessary, to insure a similar conviction in the minds of his fellow students; but though that experiment was not made, he was attacked on the fifth following day with a precursory Fever of a most unpromising kind; and on the succeeding day, an erythematic inflammation appeared on the face, and soon spread over the neck and breast; and was the forerunner of pustules, which began to emerge from it so like that of the measles, that for some hours they could not be distinguished from it. It was confluent and dark-coloured, and was attended with considerable affection of the fauces, that was succeeded by salivation. The disease was manifestly small-pox, in its confluent and most malignant form, and proceeded with an aggravation of its symptoms, which it is not here necessary to detail, until the ninth day, when the antidotal efficacy of the previous vaccination was fully manifest; and though

deep pitting was left by the pustules over the face and upper parts of the body, and considerable delicacy of health for some time succeeded, yet there was no secondary Fever; and desquamation soon after commenced, but went on slowly, as also did his recovery of constitutional vigour, until restored by a visit to his native country, from whence he returned at the commencement of winter, in perfect health.

The case of the other young gentleman, both in the manner of the attack of the precursory Fever and the appearance of the eruption, as well as in the attendant symptoms and their decline on a similar day, resembled the description just given so precisely, that it is unnecessary to recapitulate them further than to state, that the attack of Fever commenced on the 4th May, and the spots on the 6th. The chief differences which were observed regarded the sequel of these cases, and chiefly as respected the pitting after desquamation; which was not nearly as deep in the latter as in the former case, and it was also much sooner totally effaced.*

DROPSY.

Dropsy, which has been frequently attendant or consequent on the epidemic diseases of Dublin, so long as I have been acquainted with them, has become so remarkably so since the

Dropsy at all times an attendant on sequel of our epidemics, has been particularly remarkable since 1828.

* Richard Boice, 15 years of age, was admitted into the wards under my care, in January 1829, on the first day of the eruption and small-pox; and although never vaccinated or inoculated, had a much milder disease, and recovered more rapidly than either of the gentlemen, whose case I have noticed above; and further strengthen my opinion of a modified disease, sometimes following the contagion of the varioloid disease; for, in this instance, though the eruption was pustular, and accompanied with swelling of the fauces, there was no secondary fever or pitting after desquamation.

rise of the pestilential Fever of 1823, that it may be said itself to have become epidemical ever since; and accordingly, cases of dropsy have been numerous in our Hospital, in proportion to those affected with such pestilential Fevers. In my Pathological Observations on Dropsy, these circumstances are stated, as well as my reasons for treating that disease under the denominations of adynamic and dynamic dropsy; and as I intend, on the present occasion, to confine myself chiefly to illustrations of the principles, both in theory and practice, which I adopted in that work, I beg leave to refer to it, for the general statement of these principles, in order that my illustrations of them may be now more clearly understood.*

Serous effusion before, differs in nature from that after crises in Fever.

Of those serous effusions, which take place within the cranium, and other cavities, in the course of typhoid or adynamic Fever, and of the distinctness of their nature and treatment, from that of dropsy, consequent to crises in such Fevers, or from other causes, I have already spoken in the preceding pages; and the intended limits of this report having been already transgressed, I must confine myself chiefly to a few of the cases of dynamic dropsy, which were frequently to be met with in the wards under my care during the last year, and to some

* See Pathological Observations on dropsy, Part 1st.—*Dublin*, 1823.

remarkable cases of the same kind, which occurred to me in private practice.

CASE I.

Patrick Mitten, aged 44, a pensioner who had served in the army, and suffered much sickness from variety of climate, was amongst those whom I found in the convalescent wards on my return to intern duty, on the 5th of April. He had been for some days free from Fever, and strength was rapidly returning, when his breathing became affected; his pulse was full, but intermitting, and his sleep was disturbed by difficulty of respiration, if in a horizontal posture. Enlargement of the abdomen and anasarca of the lower extremities soon after became perceptible—symptoms which he stated to have formerly affected him, and on account of which he had been discharged from the army several years before. On examination, I found distinct enlargement of the liver, and soreness on pressure; this symptom too, he stated to have laboured under before, on recovery from a bad Fever, in the East Indies; but that then, instead of being lencoplegmic, as at present, he was generally jaundiced, and had copious discharges of blood from the intestines, and partly from *procedentia ani*, which are now troublesome from pain and swelling; the tongue is white and loaded; and the appetite, which was previously keen, has within the last two or three days failed; thirst urgent; the bowels costive; urine scanty, and turbid; and on evaporation, leaves a copious deposit of coagulable lymph.

Rx. Mittetur sanguis e brachio ad uncias decem. Fricetur abdomen, oleo camphorato et oleo terebinthinæ, p. æ. et tegatur panno laneo. Sumat pilulæ hydrargyri grana quinque octavâ quâque horâ ad alvi solutionem.

APRIL 7th—The blood drawn yesterday is very sizzly, through a great portion of the crassamentum from its surface, and is of a dusky

white colour. He rested better afterwards, and feels himself relieved this morning; but the ascites, and the infiltration of the lower extremities appear to be increased; distinct fluctuation in the abdomen, is perceptible, and the legs, from the knees downwards, pit on pressure; the external piles have increased, and become more painful; the urine still scanty and turbid, coagulates copiously on evaporation. Two scanty alvine discharges, scibalous, and clay-coloured; tongue still loaded.

Prescribed—*Potus acedus vegetabilis ad libitum.*

Applicentur hirudines quindecim procedentibus ani. Omittatur venæsectio. Continuentur alia ut heri prescripta sunt. M. B.

APRIL 8th—The leeches caused a copious discharge of blood, and he slept well afterwards in the horizontal posture, and awoke greatly relieved; the ascites and anasarca of the extremities much diminished; appetite and animation much improved; alvine discharges and urine the same as in the last report; skin dry.

Sumat statim pulveris jalapæ compositi drachmas duas; et repetatur dosis sextâ quâque horâ ad alvi solutionem. Postea utatur balneo. Temperaturâ 98° per minutas viginti quinque, cum strigillo.

R̄. Pulv. fol. digitalis grana duo. Pulv. ipecac. comp. grana septem. Pulv. antimonialis, grana tria. M. et signa. Sumat horâ somni.

Applicetur emplastrum vescicatorium hypochondrio dextro; et repetatur frictio abdominis.

It is unnecessary to detail minutely either the succeeding symptoms or treatment in this case,

further, than that dropsy was gradually removed, and the remedies changed from alterent to tonic, during the time he afterwards remained in the Hospital; and that he was dismissed free from complaint, on the 14th of May; but though I saw him afterwards labouring in the fields in the course of the summer, in apparent good health and spirits; I have since learned that the hydropic diathesis does not appear to have been totally corrected in his constitution.

CASE II.

Patrick Clarke, aged 60, admitted to the Hospital, April the 16th, with symptoms of general dropsy; breathing quick and laborious; frequent cough; orthopnæa for several days and nights; pulse very irregular, but full and strong; tongue loaded; no appetite; thirst urgent; skin jaundiced; belly costive; urine scanty and turbid, and coagulates on evaporation.

Mittetur sanguis e brachio ad uncias decem. Applicetur emplastrum calidum sterno. Sumat statim pilulæ hydrargyri grana quinque, exhaustu cum olei ricini semiunciâ, et olei terebinthini drachmis duabus; et repetantur eodem modo quartâ quâque horâ ad alvi solutionem.

Rx. Scillæ siccatae, grana triginti. Pulv. antimon. grana viginti. Pulv. fol. digit. grana quinque. Syrupi, q. s. fiat massa, in pil. granorum quinque divide. Sumat unam quinta quâque horâ. L.F.L.

APRIL 17th—Blood much buffed, and he felt much relief after it was drawn, and was able to sleep for three or four hours in the horizontal posture, and had some expectoration in the night. The pills and draught operated well;

the discharges are scibbalous, and mixed with grumous blood. Some pain at the extremity of the rectum, where, on examination, two large dark-coloured piles appear; other symptoms unchanged.

Applicentur hirudines duodecim procedentibus ani. Fricetur abdomen oleo terebinthinæ. Sumat pulveris jalapæ compositi drachmas duas sextâ quâque horâ ad alvi solutionem. Repe-
tantur pilulæ pectorales ut heri præscriptæ sunt. Habeat misturam expectorantem (noso-
comii) ad uncias duodecim; et sumat pauxillum subinde pro tussi.

APRIL 18th—The leeches discharged well; and the opening medicine has operated freely, and caused a considerable flow of urine besides. Slept quietly in the horizontal posture through the night, and every symptom is to-day improved.

Under this plan of treatment, recovery went on progressively; and tonic remedies having been prescribed for some days previously, he was dismissed on the first of June, free from complaint.

CASE III.

Rose Higginbotham, a respectable servant, aged 18, was admitted into the Hospital, August 4th, 1828, on account of general anasarca, severe cough, and difficult breathing; which she had been labouring under for some weeks; and previously had ascites, which succeeded to amænorhœa, of more than two years standing. Pulse quick and hard, face flushed; and she states that her Fever is considerably increased in the morning and evening; but that these exacerbations are most remarkable on alternate days. Had been bled several times for the dropsical complaint, and always with relief;

and she states also, that the blood was very much buffed. Expectoration scanty and difficult; tongue white, but soft; appetite pretty good; belly costive; urine scanty and limpid.

Rx. Pulv. ipecac. grana quindecim. Sulph. Zinci grana septem. Aquæ tepid. uncias duas. M. fiat haustus, vespere modo dicto sumendus.

Let her drink half a pint of warm water, immediately before she takes the emetic draught.
M.

AUGUST 5th—The emetic operated well, and she has since expectorated freely, the expectoration being somewhat purulent; had a quieter night afterwards, with more sleep, and she feels relieved and stronger to-day, than for some time before; but complains of some pain of the back and loins, to which she says she has been long disposed; belly costive, and other symptoms stationary, except the ascites, which is rather increased.

Rx. Pilul. Aloet. Gum myrrhæ āā grana viginti. Syrupi, q. s. fiat massa. Divide in pilul. granorum quinque. Sumat duas, omni nocte, horâ somni.

Applicentur hirudines decem inferiori margini recti, quamproxime. Fricetur abdomen oleo terebinthinæ bis indies.

AUGUST 6th—The leeches discharged well; and she feels in every respect better since; the cough has ceased, and she had very little exacerbation last evening or this morning; the dropsical infiltration diminished in every part; pulse 90, fuller and softer.

Omittantur hirudines, repetantur alia in usu.
M. B.

Under this treatment, there was a progressive improvement in the symptoms, until the

11th, when she was attacked with cynanche parotidæa, and the symptoms peculiar to that disease, proceeded for several days ; without any renewal, however, of the previous affection. The enlargement of the parotid glands was attended with some soreness of the throat, and a general scarlet rash ; and there was a corresponding change in the colour of the tongue ; so that manifestly she contracted scarlatina since her admission into Hospital, where there were at that time many cases of that kind. From this new affection, however, under the use of a vomit, gargles, and external friction of the throat, she speedily recovered, and was convalescent on the 15th of August, after which day she was put on full diet ; and besides, according to my direction, she took three ounces of the decoction of iceland moss three times a day, and aloetic purgatives occasionally. On the 22d of August, she was dismissed free from complaint, excepting that there was no return of the catamenia.

Subsequently, I learned, that her strength and appearance improved ; from the advantages of country air, and milk diet, and a little animal food ; but the catamenia did not return ; and that on her returning home, in the course of the winter, ill health again threatened ; but of the ultimate result I have not yet been informed.

On the other cases of dropsy which passed through the wards under my care in the months of August and September, (the results of which are stated in the Table, at page 51,) I cannot now make any additional remarks, as I must hasten to conclude those reports from my Hospital practice, with one out of many cases of dropsy, which occurred in the month of December.

CASE IV.

Jane Gafney, aged 58, was admitted on the 9th of December last, labouring under general dropsy, severe peripneumony; the lower extremities anasarcaous, and she had been nine days previously ill; cough hard and dry; skin jaundiced and hot; face darkly flushed; a general sense of stricture through the chest, increased by the horizontal posture, and by an attempt to lie on the left side; pulse quick and hard; abdomen tumid, with considerable soreness on pressure over the right hypochondrium; examined with the stethoscope all the upper part of the chest, returned a hollow sound; and there was considerable crepitous rail over the bronchi; pulse irregular, but full; belly costive; urine scanty, and high coloured.

Mittetur sanguis e brachio ad uncias novem. Applicetur vescicatorum sterno. Sumat pilulæ hydrargyri grana quinque, ex haustu oleoso, postea injicietur enema terebinthinatum. Habeat misturæ expectorantis uncias decem pro tussi.

DEC. 10.—The blood which trickled down the arm in drawing is not buffed, but presents the appearance of a general clot; the symptoms in general, however, are much relieved. Breathing and cough easier, and got some quiet rest in the horizontal posture. Bowels well freed by the medicine; the alvine discharges dark and foetid: a copious flow of urine, high-coloured, and with sediment; skin hot and dry.

R_x Pulv. Antimon. grana sex. Pulv. Doveri grana duodecim. Pulv. Fol. Digit. grana duo. M. et div. in char. duas equales. Sumat unam horâ somni et alteram medio noctis. Repetatur mistura expectorans. M.

DEC. 11.—Symptoms as yesterday; expectoration scanty.

R. Scillæ siccatae. Calomelanos. Gum. Ammon. singulorum, grana decem. Syrupi q. s. divide in pilul. gr. quinque. Sumat unam ter indies.

Repetantur pulveres Antimoniales cum pulvere foliorum digitalis ut heri prescripti sunt; et mistura expectorans.

DEC. 14th.—For the last three days the pectoral affection has declined under the use of the remedies prescribed on the 10th inst.; but the dropsical swelling still continues, particularly the ascites.

Sumat pulv. jalapæ compositi drachmas duas sexta quâque horâ ad alvi solutionem. Fricetur abdomen oleo terebinthinæ et tegatur panno laneo.

DEC. 15th.—The compound powder of jalap acted powerfully on the bowels, and also produced a copious discharge of urine; and she continued daily afterwards to improve, until dismissed at her own request, on the 28th day of December.

On the 24th of January, however, owing to cold and fatigue, she was again admitted into the Hospital, with precisely the same symptoms as those described on her first admission, and was treated also in the same way: the result, too, promised to be equally favourable, as, on my visit to her, on the fifth day, the 30th inst. both the dropsical effusion and pectoral affection had considerably subsided; the blood drawn also presented the same appearance as before, of a uniform dark clot. The quantity taken, however, did not exceed three ounces, owing to the increase of debility, which immediately succeeded the operation.

JAN. 31st.—The abatement of the difficulty of breathing, or of the other symptoms has not continued; but, on the contrary, she has been

affected with orthopnœa, so as to interrupt her rest; and the jaundice and deep flushing of her countenance, have been succeeded by that deep olive colour, which characterises dropsy of debility;* the abdomen is also increased in size, and the fluctuation distinctly to be felt in every part of it. The infiltration in the lower extremities has also considerably increased. The pulse full and intermitting, is accompanied with palpitation of the heart; belly costive; urine scanty and high coloured; piles, from which she states to have had occasional discharges since the catamenia finally ceased, appear to be fuller and more inflamed than they had previously been.

Prescribed—*Applicentur hirudines decem procedentibus ani.*

Rx. Pulv. jalap. c. drachmas sex, div. in partes tres. Sumat unam octavâ quâque horâ.

Rx. Pulv. fol. digitalis, gran. unam. Pulv. Jacob. veri grana quinque. Pulv. doveri, grana decem, M. et signa, sumat horâ somni. Fricetur abdomen oleo terebinthinæ et tegatur panno laneo, M. Wine, four ounces.

FEB. 1st—The leeches drew well, and the purgative was active before bed-time, when she took the anodyne powder, and subsequently enjoyed a good night's rest, and feels to-day much better in every respect; the ascites and anasacca, too, are considerably diminished.

Repetantur pilulæ calomelanos et scillæ ut olim prescriptæ sunt; et pulvis anodynus horâ somni. Continuetur frictio abdominis.

Under this treatment, and a repetition of the

* See Pathological Observations, Part 1, 65 and following pages.

leeches and compound powder of jalap, in the course of the succeeding six days, recovery was progressive ; and on the 7th she was free from complaint, and, at her own urgent desire, was allowed to return again to her former active habits of life.

Cases of dropsy in the private practice of the author, wherein bleeding was curative.

The following cases, extracted from the journal of my private practice, are given chiefly as examples of those forms of dropsy, in which bleeding is curative. Excepting the first of them, they all occurred in the past year ; and in all of them, besides it, permanent recovery from the disease was effected ; but however unfortunate the circumstances were, which made it an exception, yet it will not, I think, be found less instructive on that account.

*CASE I.

DEC. 1827—Mr. W. S. R. aged 70 years, who had been a remarkably well-formed and athletic man ; and though he had a sedentary life for years, yet had never experienced ill-health till the commencement of the preceding year, when, as he stated to me on my first visit, on the 4th of December, he was affected with interruptions of his regular rest at night, and with some loss of appetite : with both of which circumstances he had before every reason to be satisfied. From the commencement too of the failure of his rest and of his appetite, his digestion became irregular ; belly costive ; and urine sometimes scanty, sometimes profuse ; flatulence and acidity of the stomach often distressed him ; symptoms which were accompanied at all times with some oppression of breathing ; and the

* Mr. Dyas, of Castle-street, was Apothecary in this case.

breathing was easily hurried by even slight exertion. On examination, I now found general dropsy had taken place in an urgent degree; it appeared that it had commenced with ascites, which was succeeded by anasarca of the lower extremities; and orthopnœa, for the last week, indicated hydropic effusion into the cavity of the thorax also. On examining more closely, there was considerable soreness on pressure over the right hypochondrium, and piles considerably enlarged and inflamed, occupied the lower extremity of the rectum; the pulse was full and strong, but intermitting at every third beat; and he complained of a corresponding uneasiness at the region of the heart; belly costive; urine scanty and turbid, with much pink-coloured sediment; thirst urgent, but some appetite for food; tongue loaded; skin (particularly over the albuginæ of the eyes) generally, but slightly jaundiced.

Mittetur sanguis e brachio, ad uncias decem. Applicetur emplastrum vesicatorium amplum hypochondrio dextro, et scorbiculo cordis tendens.

Rx. Pilul. hydrargyr. grana quindecim. Calomelanos, grana decem. Camphoræ, grana tria. Antim. tartaris. grana duo. Olei crotoni, guttas duas. Syrupi zinziber. quantum sufficit fiat massa; tere simul optime, et divide in pilul. granorum quinque. Sumat unam sextâ quâque horâ.

Rx. Olei ricini unciam cum semisse. Olei Terebinth. drachmas tres. Confectio. anyd. g. s. Aquæ purleg. uncias tres, M. et tere simul optime dein divide in haust. duos equales. Signa, sumat unum statim et alterum post horas quatuor nisi prius solverit alvus.

Let him have toast, and barley water to drink freely; and besides, a small portion of light animal food, let him have wine and wa-

ter, if necessary, to support his strength after the bleeding.

DEC. 5th—On my second visit, I learned, that he had been much relieved by the bleeding; his breathing became easier, and had several hours sleep afterwards in the recumbent posture. The blood drawn was deeply and densely buffed, and firmly coagulated; the pulse was full and firm, with less intermission; the purgative medicine had operated well, and the alvine discharges were sciballous and whitish; the urine, somewhat increased in quantity, was turbid, and left a pink-coloured deposit; on evaporation, it coagulated, and the coagulum at first presented much of the external character of the buffy coat of the blood; but when further desiccated by the heat, it became of a much lighter colour, and more brittle consistence; the other symptoms were stationary; the blister has risen well. Let it be removed, and dressed with spermacæti ointment.

Applicentur hirudines duodecem procedentibus ani. Fricetur abdomen oleo terebinthinæ. Repetantur pilulæ ut heri prescriptæ sunt.

Rx. Pulv. Jacob. ver. grana tria. Pulv. Ipecac. comp. grana octo. Pulv. Fol. Digit. grana duo. Tere simul ft. pulvis horâ somni sumendus.

Rx. Pulv. Jalap. c. drachmas duas. Pulv. Zinziberis grana decem. M. Tere simul optime ft. pulvis statim sumendus.

The same drinks and diet as yesterday.

DEC. 6th.—Feels himself better in every respect; had a quiet night's rest in the horizontal posture, and awoke in a general free and warm perspiration. The leeches produced a great discharge of blood, and the flow of urine has greatly increased, and is of the natural colour.

Had several alvine dejections, which are deeply tinged with bile. The ascites and anasarca are considerably diminished, and thirst much abated.

Rx. Pulv. Fol. Digitalis grana tria. Acetalis Kali drachmam cum semisse. Olei Juniperi guttas quindecim. M. et div. in bolos tres. Sumat unam ter in dies Repetatur pulvis anodynus horâ somni; fricetur abdomen oleo terebinthinæ et tegatur panno laneo.

Under this treatment, varied according to circumstances, which it is not necessary to detail, recovery proceeded rapidly during the succeeding ten days; at the end of which time he released himself from medical restraint, and resumed his former avocations and exercise, with a degree of activity much exceeding what he had been observed capable of, for several years before. This general improvement continued until the 25th of Dec. on which day he unfortunately indulged in his custom of dining with his son's family, where he was in good spirits, and was observed to eat unusually heartily; but on retiring to the drawing-room, whilst conversing with one of his grand-children, his voice suddenly failed, and almost immediately afterwards he fell lifeless from his chair—a termination which, I am persuaded, was chiefly owing to the oppression of vital power, by the overloaded state of the stomach; and therefore this, as well as other parts of the case, must afford instruction.

*CASE II.

A gentleman, aged 66 years, much above the middle size, but well-formed; had been possessed of uninterrupted health and activity, until he had reached his 50th year, when

* Mr. Sohan, of Fleet-street, was the Apothecary in this case.

he was attacked with irregular gout ; and subsequently a scaly eruption, especially on the lower extremities, alternated with affections of the stomach and bowels, that ultimately terminated in a more regular attack of gout in the feet. These gouty affections afterwards came on yearly, sometimes in a regular, sometimes in an irregular manner, but always was succeeded with anasarca of the lower extremities, which generally continued several weeks before it entirely disappeared. The abdomen, too, which had been for many years naturally very full, was on these occasions considerably enlarged, and the integuments anasarcaous. In the year 1826, when paralytic affections occurred with unusual frequency, this gentleman had a very alarming attack ; his speech becoming suddenly affected ; his mouth drawn to one side, and the muscles on the other, particularly those of the eye, becoming paralytic ; the pulse irregular and feeble, particularly in the affected side, was attended with palpitations of the heart, and the carotids beat unusually full and strong ; the belly was costive ; but urine passed copiously, was colourless ; feet cold, and somewhat anasarcaous.

Under the employment of leeches to the temples, a blister to the neck, active purgatives, which produced copious malænous dejections ; and subsequently, by a compound of James's Powder and digitalis, this paralytic affection was removed ; but it was succeeded by a regular attack of gout in both feet in succession ; and this was again succeeded by anasarca, both of the lower extremities and abdominal integuments. These complaints, however, also subsided, and he enjoyed his usual health and strength until the commencement of 1826, when he again called on me on account of an hydropic affection, which then had less the appearance of connection with gout than in any former attack ;

and this tendency seemed to be very general through all the cavities, even that of the cranium itself, as was indicated by some threatening of the return of the paralytic affection. The breathing, likewise became more impeded than in any previous attack, and the irregularity of the pulse, and of the beating of the heart, was also more urgent than they had previously been. These alarming affections were again relieved, chiefly by the employment of mercurials, alternated with compound powder of jalap, by which copious malænous and afterwards bilious dejections were produced; compounds of James's powder and digitalis and frictions of turpentine over the abdomen were also beneficially employed.

By these means, the dropsical affection was again entirely removed, and I was not afterwards called on, until the 9th of May, 1828, when I found that dropsy had taken place in every visible part, and learned that it had been preceded for several days by obstinate costiveness, notwithstanding the employment of strong purgatives. The abdomen was now enlarged much beyond its natural size, and there was distinct fluctuations perceptible in almost every part of it; its integuments were anasaruous, and the lower extremities, from the hips downwards, were also anasaruous, and greatly swelled. The breathing was difficult and accompanied by a painful sense of stricture across the chest; but this difficulty did not seem to be increased by change of position. The pulse was extremely irregular and unequal, intermitting at every third beat; there was also considerable sense of oppression and palpitation of the heart.—Speech was impeded; and the paralytic affection of the face was more obvious than it had been at any preceding period. Face flushed; slight head-ache, and pain of back; skin hot and dry; tongue white and loaded; some thirst.

Urine, which in general had been copiously passed, was now very much diminished in quantity; the urine, on evaporation, did not coagulate.—Slight appearance of piles externally, which were red and inflamed.

Bleeding from the arm was attempted; but owing to the singularly minute distribution of the veins, scarcely any blood could be taken. This extraordinary minuteness of venous ramification, so unusual in a man of so large a stature, was the more remarkable; and it had offered impediments to bleeding by the lancet, where that operation was deemed necessary in previous attacks of indisposition; but it appeared to me, that the venous ramifications were now more contracted and minute than they had before been.

Prescribed—*Applicentur hirudines quindecim procedentibus ani. Fricetur abdomen oleo terebinthinæ et oleo camphorato p. æ.*

Rx. Pilul. Hydrar. grana quindecim. Gambogiæ grana decem. Camphoræ grana tria. Antim Tartaris grana duo. Olei Crotoni guttas quatuor. Syrupi q. s. fiat massa et in pilulas granorum quinque divide. Signaumat unam omni bihorio ex misturæ sequentis unciis duabus ad alvi solutionem.

Rx. Decoct. Aloes C. uncias. octo. Elect. Scammon. drachmas duas. Tere simul fiat mistura.

Barley-water and light whey for drink.

I learned, eight hours afterwards, that the leeches having been applied had discharged copiously; the attendants supposed that the blood received into the utensil from the bites of the leeches, amounted nearly to two pints, full measure; that it was dark and grumous, previous to the feculent discharge, which, within the last two hours had been very abundant.

He afterwards felt greatly relieved of the sense of stricture in the chest, and of the pain at head and back; but there was for a short time a strong tendency to syncope, whilst he was in the erect posture, and even whilst lying in bed, felt unusual debility. The pulse, however, was much more regular and equal, and the skin softer, than in the morning.

Rx. Pulv. Jacob. Veri grana quinque. Pulv. Ipecac. Comp. grana octo. M. et signa. Sumat horâ somni ex aliquo vehiculo.

Rx. Aquæ acet. Ammon. uncias duas. Aquæ puræ, uncias quinque. Spir. ammon. arom. drachmas tres. Syrupi zinziberis, unciam M. Signa sumat cochlearia ampla duo tertiâ quâque horâ. Repetatur frictio.

On the succeeding day, there was decisive improvement in every symptom; and under the operation of compound powder of jalap, administered every second day, alternated with blue pill; and a compound of James's Powder and digitalis every night, recovery was complete in the beginning of June; and excepting slight attacks of regular gout in the feet; this gentleman has since enjoyed good health, and his accustomed vigour and activity both of mind and body.

*CASE III.

A gentleman, aged 22 years, of studious and sedentary habits, but well formed and athletic, previous to the spring of 1828, consulted me first on the 5th of May last, on account of general anasarca, attended with considerable debility, and loss of complexion; pain affecting various parts of the abdomen, but particularly the epigastrium, which also impeded full in-

* The medicine was supplied in this case by the Medical Hall, in Sackville-street.

spiration ; the pulse full and strong, 120 in the minute ; the tongue foul and loaded ; belly generally costive ; urine scanty and dark-coloured, but not depositing any sediment ; thirst urgent. The anasarca was greatly increased in every dependent part, and was therefore greatest in the lower extremities in the evening, but in the morning, after awaking, the infiltration was found to be greatest on the side on which he had slept, which for some time had been the opposite one to that chiefly affected by pain. For some time previous to the commencement of these complaints, he had been affected with a debilitating muco-purulent discharge from the urethra, for which he had employed tonics of various kinds, both locally and generally ; and for some time that discharge had been considerably, but not entirely checked.

Prescribed—*Mittetur sanguis e brachio ad uncias duodecim.*

Rx. Pulv. Jalap. c. drachmas sex. Pulv. zinziber. semi drachmam. Tere simul optime et divide in chartulas tres æquales. Sumat unam ter indies. Barley water and light whey for drink, and an abstemious diet.

MAY 6th—Being yesterday present, when Surgeon Haffield bled the patient ; and perceiving that the blood as it flowed was remarkably dark and sizzly ; full 18 ounces of blood were taken ; and soon afterwards, its surface was deeply and densely buffed, and presented that appearance which, as on various occasions I have stated, indicates disease in the mesenteric or hepatic systems ; to-day that appearance pervades the largest portion of the crassamentum in each of the cups, and the surrounding serum is turbid. Felt much relieved by the bleeding, and passed an easier night than he has done for some time, and perspired copiously ; the pain at the right side still continues, and extends to the shoulder, and to the back ; pulse

still full and strong, 100 ; the anasarcaous swellings somewhat increased, particularly over the whole of the trunk, and the upper extremity on the right side ; medicine produced copious alvine dejections, which are scibalous, and of a clay colour ; urine somewhat increased ; but on evaporation gives a large portion of coagulable matter, that strikingly resembles the buffed blood drawn from the arm yesterday ; the urethral discharge is also somewhat increased.

Prescribed—*Applicentur hirudines duodecim hypochondrio dextro, et octo margini inferiori recti. Fricentur abdomen et reliquæ corporis partes affectæ, oleo terebinthinæ bis indies. Repetantur pulveres jalapæ compositi ut heri præscripti sunt.*

MAY 7th—The leeches drew well, and they produced a copious discharge of blood, both from the side and from the perinæum ; the purgative medicine has also produced a copious discharge of the same kind of feculent matter yesterday described ; the pain of side, shoulder, and back is much relieved, and he has been able to lie upon the right side, and bear pressure over the epigastrium, much better than before ; the night sweats were copious, but the urine and urethral discharge somewhat diminished ; the anasarcaous swelling in the upper parts of the back and right arm is less, but is apparently increased at the sacrum, nates, and lower extremities.

Prescribed—*Foveatur pars dicta aquâ calidâ, sæpe indies.*

Rx. Pilul. hydrargyri grana sexdecim. Pulv. folior. digit, grana quatuor. Syrupi, q. s. fiat massa in pilulas granorum quinque divide. Sumat unam sextâ quâque horâ.

Rx. Olei ricini unciam cum semisse. Olei terebinth.

semiunciam. Confect. anygdal. q. s. Aquæ pulegii uncias tres, M. et tere optime simul, dein divide in haustus duos æquales. Sumat unum vespere et alterum cras mane.

MAY 8th—Passed rather an uneasy night, owing to sickness of the stomach, and the frequent discharges from his bowels by the medicine; and in the course of the night a large portion, amounting to several feet, of a tape worm, was passed from the rectum, and he feels better in every respect to-day; both urine and urethral discharge are somewhat increased, but the former is of a dark colour, and coagulates by evaporation in the same manner as already described; otherwise, very little change in the symptoms, except that the night sweats are diminished, and he complains more of debility than he had done before; the pulse, however, continues full and strong, and 100 in the minute.

Repetantur omnia ut heri præscripta sunt. Let the diet be a little more generous by the allowance of chicken-broth, and farinaceous drinks, with a small addition of wine, whenever the urgency of debility seems to demand it.

In the week succeeding the last report, pain, and other inflammatory symptoms having subsided after the evacuations already stated, assisted by a blister to the right side, prescribed in consultation with Dr. Hill; the chief indications afterwards were to restore the natural secretions to a more healthy condition, and to support the strength without renewing the inflammatory affection. Accordingly, the skin having become dry and hot at night, and the urinal and urethral discharge having also diminished, tepid baths were employed, and small doses of James's Powder administered at night, and in the day time, preparations of dandelion were given, assisted occasionally by doses of mercur-

rial pill, so as to insure a regular discharge from the bowels, and excite the biliary system to a more vigorous action.

By such means, towards the middle of the month, the hydropic affection was nearly removed, and with the assistance of tonic medicines, and a more generous diet, he was enabled to take exercise in the open air with advantage; but unfortunately, on the 20th, he spent a large proportion of the day amongst a dense assemblage of children, in one of our Cathedrals, and afterwards exposed himself to the cold easterly winds, which then prevailed, while driving back to his country residence; consequently he was again attacked with the same symptoms, which have been already described; they were again relieved by nearly similar remedies, so that at the end of another week, health was so far restored, as again enabled him to use exercise in a carriage in the open air; but still, a considerable degree of anasarca, particularly of the most dependant part of the trunk and extremities remained, and the urine presented the same appearance already described, on evaporation. Under these circumstances, his anxiety to be present at the examination for fellowships in the College, induced him to exceed the limits I prescribed; and the consequence of sitting so many days in so crowded an assembly, was a renewal of his indisposition in a more urgent degree, than at any previous period. The pain of side, and other symptoms of inflammation, appeared to me urgently to demand a repetition of the employment of the lancet; but owing to the prejudice which still subsisted against that remedy in dropsical affections, I was obliged to confine myself to bleeding by leeches from the parts where they had been before applied; a blister to the right side, and the other means already detailed, to excite healthy secretions; but though these succeeded in a

considerable degree, the complaints were not so decidedly relieved as they had been, when the bleeding from the arm was employed.

In July, the cold easterly winds still prevailing in an unusual degree, and exposure to the air, even in a close carriage, repeatedly renewed the hydropic diathesis; and although alleviated by a repetition of similar means, obviously was not subdued. Having met in consultation Dr. Crampton, who has contributed so much towards just views of the nature and treatment of dropsies, it was agreed, that the plan which I had recommended, should be more implicitly followed; and, accordingly, in a few days afterwards, when pain, and other symptoms of inflammation, chiefly owing, I believe, to the prevalence of easterly winds, preceded a sudden increase of hydropic effusion; the bleeding from the arm was repeated to 16 ounces; and on the succeeding day, 20 leeches were applied partly to the right hypochondrium, and partly to the perinæum. The blood drawn from the arm had precisely the same sizzly appearance as on former occasions, and the relief that followed was equally decisive, both of the symptoms in general, and the dropsical swellings in particular; the other remedies too, were much more efficient than when they had not been preceded by the use of the lancet. The quantity of coagulable matter in the urine, on evaporation, was found to be considerably less than it had been before. On the second day after the bleeding from the arm, another large portion of a tœnia was discharged, and health returned more rapidly than it had done on convalescence from any of the former attacks. In a short time afterwards, this gentleman was free from any symptom of disease; but for security, it was determined that he should spend the remaining part of the summer at Leamington; and though, whilst there, he experienced some return of indisposition, as I have

since learned, he is now, in 1829, in the enjoyment of good health.

*CASE IV.

A Lady, 59 years of age, mother of a numerous and fine family, well formed, and above the middle size, consulted me first on the 17th of July, 1828, on account of general dropsical affections, under which she had been labouring more or less during the preceding two years; and I found ascites had taken place to a considerable extent; the lower extremities anasarca; the breathing oppressed, and orthopnea to such a degree, that she had not been able to lye in the horizontal posture for many nights; she complained of a painful sense of stricture in the left side, extending across the thorax, and to the back, which was increased by a dry cough; the skin was hot and dry, and the cheeks occupied with a circumscribed livid flush; the pulse was unequal and intermitting, every second beat, but was full and strong; there was a great sense of uneasiness and palpitation of the heart, and the irregularity of its action was readily ascertained by applying the hand over it; the pulsation too was lower down than it should be; these palpitations of the heart were accompanied by a sense of death-like weakness; tongue white and loaded; thirst urgent; belly costive, unless when acted upon by purgative medicines; urine scanty, and high coloured, depositing much pink-coloured sediment; and on evaporation, a large proportion of coagulable matter. Under the directions of Dr. Cheyne and Surgeon Colles, who had successively attended her in the course of her illness, and whose assistance I regretted, I was not allowed to avail myself of, she had been bled and blistered at different times with some temporary relief. I now learned, too, that after the catamenia had entirely ceased, copious hæmorrh-

* Mr. Sohan was the Apothecary in this case.

hoidal discharges succeeded for several years, and did not cease to return at fixed periods, until a short time before her present complaints began; and that piles of a considerable magnitude still continued, and were painful and swollen.

Prescribed—*Applicentur hirudines quindecim procedentibus ani. Fricetur abdomen oleo terebinthinæ et applicetur emplastrum vesicæ rim regioni cordis.*

Rx. Pilul. hydrargyr, grana duodecim. Calomelanos, grana octo. Camphoræ, grana quinque. Syrupi, q. s. fiat massa. tere simul optime, et divide in pilulas granorum quamque. Signa sumat unam sextâ quâque horâ ex uno haustum sequentium.

Rx. Decocti alæes c. unciam. Elect scamm. grana decem. Misce fiat haustus. Mitte tres tales.

Light whey and barley water for drink, and light broths with capsicum, or Madeira and water, to relieve the sense of sinking, and the weakness, whenever it is urgently felt.

JULY 18th—The leeches caused a copious discharge of blood; the pills and draughts have operated well, and caused a copious discharge of scibalous fœces; the renal discharge has been also considerably increased, but still coagulates on evaporation; the blister has risen well, and she has had several hours quiet sleep in the night in the horizontal posture; though it was once or twice interrupted by sudden weakness, and nervous sensations; which compelled her to sit up in the bed; the skin still hot and dry, and the expectoration scanty, and cough frequent, but unaccompanied by the same pain or sense of stricture of the chest or back; thirst less urgent; palpitation of the heart considerably relieved; and pulse more equal and regular, but still full and strong.

R. Pulv. Jacob. v. grana duodecim. Hydrar. cum creta grana octo. Pulv. fol. digital. grana tres. Tere optime simul et divide in chartulas tres aquales. Sumat unam octavâ quâque horâ. Repetatur fricito oleo terebinthinæ.

Let the same drinks, broths, and wine and water, be continued, as directed yesterday.

JULY 19th—Passed a quiet night in the horizontal posture, and awoke in a copious perspiration, and feels in every respect much better to-day. The anasarca of the lower extremities has totally disappeared, and the abdomen is reduced nearly to its natural size. The pulse has become regular, and palpitation of the heart has ceased; and altogether she feels relieved of every distressing symptom, except alarm for their return; bowels free, the dejections bilious; the renal discharges much increased, depositing much pink-coloured sediment.

Continuentur omnia ut heri præscripta sunt.

The dropsical affection being in a few days totally removed under these means; this lady changed her residence from the north to the south side of the city; and, aided by a more generous diet, together with preparations of dandelion, taken daily, the return of health was progressive until the 2d of August, when a severe wetting, whilst driving in an open carriage, brought on a severe attack of pneumonia, which demanded repeated venæsection, and the local application of leeches for its relief; and subsequently, a general pimply eruption appeared on the surface, and for some days alternated with the irregularity of the pulse, palpitation of the heart, and other symptoms, which threatened a return of the dropsical affections already described. Under the use of Harrowgate water, and gentle aperients, these symptoms soon subsided; and towards the latter

end of the month of August, there was no complaint remaining; but for the complete establishment of health, I thought it would be advisable that this lady should pass the remainder of the autumnal months at Leamington; and I am happy to say, my wishes have been realized; and that though called upon to visit her in the commencement of the present year, on account of a slight attack of rheumatism, there has been no return of any dropsical affection.

Conclusion of
illustrations on
Dropsy.

I would willingly extend these extracts from my journal much farther, but I must hasten to conclude my illustrations with the following abridgement of two cases of dropsy, of more recent date, which were consequent on infarction in the venous system of the mesenteric and hepatic vessels; and though connected with somewhat different exciting causes, were yet curable by nearly the same means; and for a fuller account of the principles and practice intended to be illustrated by these cases, I beg leave to refer to my former publications on the subject, as well as the second note in the Appendix to this work.

*CASE V.

A lady, aged 56 years, of delicate frame and spare habit, consulted me in August last, on account of indisposition, which had commenced some months before, but was for a while arrested on the formation of an anthrax on the back, which had been operated on and removed by Surgeon Colles. Sometime afterwards, howe-

* Mr. Mulock, of Charlemont-street, was Apothecary to this family.

ver, her stomachic and pectoral complaints returned, and with them dysenteric discharges from the bowels and hæmaturia, which symptoms were succeeded by the dropsical swelling under which she now labours. Ascites is considerably advanced; and the lower extremities are anasarcaous and leucophlegmatic; the breathing is much impeded, particularly in the horizontal posture; and there is a considerable sense of tightness under the sternum and scrobiculus cordis, as well as soreness on pressure over any part of the abdomen, but particularly at the hypochondria. The alvine discharges are dark and mingled with grumous blood; the urine is scanty and dark-coloured, apparently from a mixture of blood, which it holds in imperfect solution; the pulse is unequal—some beats being full and strong, and others more contracted. For some time after the ceasing of the catamenia, she had internal piles; they discharged frequently, until the formation of the anthrax; but have not done so since. The urine, on evaporation coagulates.

PRESCRIBED,

Rx. Olei Ricini uncias duas. Consec. Amygdalæ, q. s. Aquæ Pureligii uncias quinque. Tinctur. Opii guttas viginti-sex. Tere optime simul; et signa. Sumat coch. ampla duo omni bihorio ad alvi solutionem. Injicietur enema emolliens bis in dies. Fricetur abdomen linimento ex oleo terebinthinæ et oleo ammoniato, p. æ.

Rx. Salis Nitri grana octo. Pulv. Ipecac. C. grana septem. Tere simul et signa. Sumat horâ somni. Habeat decoctum hordei compositum et infusum Lini pro potu commune. Light broths.

Under these remedies, directed against the dysenteric symptoms, they were considerably relieved; but the dropsical effusion, and the hæmaturia, accompanied by dyspnœa and general oppression, continued, until blood was

taken from the arm by the lancet, and locally from the hæmorrhoidal vessels by leeches, when the latter train of symptoms also were greatly relieved; and with the assistance of digitalis internally, alternated with aperients, they were ultimately altogether removed, so that, in the month of October, this lady was restored to the enjoyment of as full health as could be hoped for, considering her naturally delicate constitution, and the period of her life.

*CASE VI.

A lady, aged 69, well-formed, and mother of a numerous family, consulted me on the 10th of December last, on account of difficulty of breathing, cough, orthopnæa, irregular pulse, and other symptoms of dropsical effusion on the chest; the lower extremities anasarcaous; the abdomen considerably enlarged, and sore on pressure. The skin hot, and somewhat jaundiced, with a circumscribed flush on the cheeks. Tongue white and loaded; thirst urgent. No appetite for food, and but little rest at night, owing to the difficulty of breathing. Belly costive; urine scanty and turbid, depositing a copious pink-coloured sediment. During gestation, she had always suffered considerably from piles; and for some years after the catamenia had ceased, was subject to hæmorrhoidal discharges.

In this case, too, general and local bleeding, aided by similar means to those employed in the preceding case, was succeeded by relief of the most urgent symptoms. During convalescence, regular gout appeared successively in both feet, and ultimately in the upper extremities, though she never had any such appearance heretofore; they have latterly, however, been the chief sources of her distress, and there has been no return of the dropsical affection.

* Mr. M'Alpine, of Suffolk-street, was Apothecary in this case.

APPENDIX.

NOTE I.

The following Extract is taken from a Letter written by the Author of this Report, to the Managing Committee of the Fever Hospital and House of Recovery, Cork-street, dated 31st of May, 1826.

The unprecedented increase of Patients, under the most exquisite forms of Spotted or Typhus Fever, received within the two months of my intern attendance just concluded, being evidently the result of a constant, though somewhat irregular, growth of that form of Epidemic which commenced three years and a half ago, I think it my privilege and my duty to submit the following brief statement to you, the authenticity of which may be proved by comparing the facts with the original documents in your hands; and the *practical utility* of the corollaries which I deduced from them, may also, in a great measure, be decided by the same documents.

The characteristics by which this Epidemic was designated at its rise, still continue the same; viz.—purple eruptions on the skin; livid and mortifying extremities; glandular bubonic swellings; bilious green vomitings; melænous and dysenteric discharges from the intestines; beside many other symptoms of extreme debility, which may be found stated in my Report for the year 1823. Fever has also been more generally the consequence of exposure to contagion since that year, than at former periods—an important fact, which I am able to state from notes taken, at my request, by the head-nurse (Mrs. Bridges), on the admission of the Patient placed under my care.

General Board of Health, June 17th, 1826.

GENTLEMEN,

I am directed by the General Board of Health, to request you will communicate to the Board the result of your observations, as to the prevalence of Fever among the poor of this city, and state whether Fever spreads through families, and whether many individuals remain in their houses, and pass through the disease without receiving Hospital relief.

I am further directed to request you will give your opinion derived from observation and inspection of the poor in their own houses, as to the causes which at present chiefly contribute to extend Fever.

Your reply forwarded to me, with as little delay as possible, will be esteemed a favour.

I have the honour to be,

Gentlemen,

Your obedient humble servant,

F. BARKER, Secretary.

*To the Physicians of the Hospital and
House of Recovery, Cork-st.*

To which five of the Physicians returned the following answer :—

(COPY.)

Fever Hospital, June 21, 1826.

SIR,

We have the honour to acknowledge the receipt of your letter of the 17th instant, and beg in reply to state, that Fever extensively prevails at present among the poor of this city—it spreads very much in families. A considerable number of persons unable to obtain Hospital relief, pass through the disorder in their own homes : the causes of its diffusion, we cannot with sufficient certainty assign. We may, however, state, that the contagion of Fever seems to have acquired within a short period more than ordinary force, and that its influence is greatly extended by the wretched state of the poor, and the sick being suffered to remain too long among the healthy.

We have the honour to be, Sir,

Your very humble servants,

S. ROBINSON, M. D.

J. O'BRIEN, M. D.

J. O'REARDON, M. D.

P. HARKAN, M. D.

SAMUEL STRATTEN, M. D.

*To Francis Barker, Esq. M. D. Secretary
to the General Board of Health.*

York-street, June 24, 1826.

SIR,

While acknowledging the receipt of your letter of the 17th inst., addressed to the Physicians of the Fever Hospital and House of Recovery, Cork-street, from the General Board of Health, I cannot but regret that difference of opinion between my colleagues and myself, obliges me to return this answer with such a delay, and with my single signature attached to it; and on that account too, I have to claim the patience of your Board, whilst, in compliance with the request of the Managing Committee of our Hospital, I go into a detail that might have been otherwise deemed inexpedient.

Your first quere respecting the result of my observations, as to the prevalence of Fever at present among the poor of this city, and whether many individuals remain in their houses, and pass through the disease without receiving Hospital relief? may, I think, be answered without hesitation. It does prevail to an extent truly formidable, and spreads through families with increasing rapidity, many remaining in their own homes during the whole course of the disease. But I feel it my duty to add, that the characteristics which evinced the pestilential nature of this epidemic, during the last three years and a half, such as are detailed in several of my publications* during that period, have not of late been more deeply marked; however, the increased heat and drought of this summer, as is usual with pestilential Fevers, may have tended to diffuse them; and the proportion of sick poor who pass through disease at their own houses, does not appear to me to be at present greater than I have known to happen at former periods. Greater promptitude in application for admission to the Hospital, seems to me to account just now for the increased number of admissions daily, as well as for the diminished mortality in the Hospital. For the efficacy of remedies is always most remarkable in early stages of Fever; then, too, irrecoverable mistakes are most likely to be made; and the history of Fever Hospitals shows, that a very large portion of the deaths occur amongst those patients long ill, previous to their admission.

To illustrate my opinions of the more contagious nature of that Fever, which has been attended during the last three years and a half by such remarkable characteristics, I beg leave to refer to the annexed Table, which I have been enabled to construct by the assistance given me by the head-nurse; and hope, on some other occasion, to extend its columns to a longer period. It shows the number of patients, male and female, placed in the wards under my care, from the 2d of April last, to the 3d of May, inclusive; and of these, the number who had been previously ill, less than six days, and more than six days—the number exposed to contagion—the number with petechiæ—and the number bled.

	Males.	Females.
Number of Patients less than six days previously ill, ..	180	170
Number more than six days previously ill.....	150	50
	—330	—220
Number exposed to contagion.....	194	190
Number with petechiæ	206	180
Number bled	30	35

That the proportion of cases with petechiæ would not be so great in other wards of the Hospital, as those under my care is, I think, probable; for my wards being situated near the entrance, were more convenient for the reception of severe cases.

To your further queries, as to my “opinion, derived from observation and inspection of the poor in their own houses,” “as to the causes

* See Pathological Observations, &c. &c. Also Medical Report for the year 1823.

which at present chiefly contribute to extend Fever," I answer, without hesitation, from an experience of more than a quarter of a century, that they are the same now which made the Fever Hospital in Cork-street necessary, as well as the others of the same kind that have been since erected in various parts of Dublin; causes, which have produced a growth of disease, unprecedented in the records of any other city or community. †The proportion of the increase, but far short of its actual extent, might be judged of by inspecting a Table, in an article written by me on the Pathology of Fever, and published in the last Number of the Medical and Physical Journal, on the first of the present month. The fitness of observations on the uniformity of the growth of disease and demoralization, made on that occasion, appears to me to be further illustrated by the report given at the meeting of the Prison Association, held at the Rotunda, on Thursday last; more especially by the statement made by the Recorder, of the progressive increase of indictments, which amounted in the year 1807 to 445; but in that of 1825, to 2563, of whom, 1191 were convicted, some capitally, some transported, and others condemned to minor periods of imprisonment,* And you will find by the Table to which I have referred, that in 1804, the first year in which the Fever Hospital in Cork-street was opened, then the only one in Dublin, 1415 patients were admitted, of whom, 29 died, giving an average mortality of one in $14\frac{9}{29}$. From that to the year 1822 inclusive, 46,581, were admitted, of whom, 2,869 died, a mortality of 1 in $16\frac{507}{2869}$; but in the last three years, *i. e.* from 1823 to 1825 inclusive, 10,764 patients were admitted, of whom 1001 died, a mortality of 1 in $10\frac{764}{1001}$.

I might adduce many facts besides to prove, that in their destructive career, those two great national calamities adverted to have advanced, *pari passu*, and also that they have been found not unfrequently to be ancillary to each other in their havoc on the physical and intellectual virtues of the poor classes; the following, however, taken from the registry of our Hospital, must now suffice. Fever has been always most fatal to *men who have arrived at, or passed over the meridian of life*, when they are surrounded by the largest number in family, then too, most dependant on them, either for support or instruction. Hence, destitute widows and orphans swell the number of those abandoned to temptation and commission of "treasons, stratagems, and crimes," which of late have unfortunately so defaced the pages of Irish History.

Though many as the causes are, to which the distresses of Ireland may be fairly attributed; yet, I believe, the chief of the contemporaneous and proportionate growth of its two greatest calamities is, the want of profitable employment for the increasing population. The introduction of machinery, too, appears to me to have contributed its share, by in the first instance, curtailing manual labour, and afterwards by overstocking the markets

* See Saunders's News-Letter, June 22, 1826.

of that labour by the influx from other places of those, whose previous experience rendered them more skilful in the working of the machinery.

Our artisans, thus bereft of employment, have been most injuriously misrepresented by itinerant orators, and scribbling tourists; and the violence of party feeling, into which our people have been divided, has prevented them from repelling the foul calumnies thus heaped on the peasantry, alike unfounded as respects either their physical capabilities or natural dispositions; calumnies which, I believe, have materially interfered with the due exercise of patronage for the encouragement of individual exertion, and even perhaps with national commerce itself.

Convinced, from the total failure of the means of prevention hitherto devised to check the growth of the evils under consideration, that none can ever be effectual, unless directed to the removal of the causes, I have been induced to insist the longer on such as I consider the chief of these causes, in order to recommend the consideration of them to those in power; and I trust I shall be excused from adding the expression of my humble opinion, that if the cultivation of the natural resources of Ireland was fairly laid open to its people, then the experiment made in Glasgow, proposed by the Reverend Dr. Chalmers for the removal of pauperism, might be made here with much greater probability of success, the experiment I mean, was that of withholding mere eleemosynary grants from those capable of earning their support.

I have the honour to be, Sir,

Your most obedient humble servant,

WILLIAM STOKER, M.D.

Senior Physician to the Fever Hospital and
House of Recovery, Cork-street.

To Francis Barker, M. D. Secretary to the
General Board of Health.

NOTE II.

Cases of Organic Disease, with dissections.

These cases and dissections appear to me to afford fit illustration of the opinions expressed in the first part of my Pathological Observations, already published (in the Preface, page iii.) viz. “that many diseases depend on changes which take place *primarily in the fluids*; and that if the commencement of diseases be found common to the fluids, as well as to the solids, it must be important to ascertain which is primarily affected, in order to form correct views of the course of diseased actions, or of the ravages found impressed on the various organs after death, so as to be thereby guided to the most effectual means for prevention or cure.” And, further, I wish to show the application of those experiments, which I instituted to

prove, that the buffed surfaces which appear on the blood drawn in certain diseases, do not depend on slow coagulation, but upon actual morbid changes, (probably connected with deranged or imperfect sanguification,) which take place in the vital fluid, while still circulating in the sanguiferous system, and that these changes influence the course and symptoms of diseases.

Some of these cases appear to me to be also well suited to aid pathological inquiry, respecting those very remarkable changes which in diseases of the mesenteric and hepatic systems, take place in the physical characters of the blood, and likewise respecting the tendency to organic disease derived from such changes by the direct connection, which may be clearly traced, between the buffed surfaces of the blood drawn during life and the organic diseases themselves. How far these cases in general afford additional evidence in favour of the physiological hypothesis which may be found in the preceding pages, that organic affinities exist in the hepatic system, which, when duly controuled by vital power, assist in the elaboration, and supply the solids in the animal economy ; it is freely left for the reader's consideration

** First Case, showing the commencement of Organic Disease, and its connection with Sisy Blood.†*

A gentleman, 70 years of age, was remarkably healthy and vigorous until the beginning of April 1825, except an eruption (the *Lepra Vulgaris*) which, for many years past, but especially in the spring months, affected a great part of his right leg, and the appearance and disappearance of which, sometimes influenced the state of his health, particularly as regarded his stomach ; but so slightly, however, that he never found it necessary to have recourse to any remedy for it. In the commencement of April, he was attacked with cold, which confined him for a few days to the house for the first time ; and on his recovery from it, the eruption on his leg re-appeared in a greater degree than usual. This, however, did not prevent his resuming his usual active avocations, until about the 5th of the month, when his chest became more affected than it had been in his recent attack, and the eruption on the leg suddenly disappeared. By moderate evacuations, prescribed by his medical attendant, Mr. Mansfield, the pectoral complaint was for some days moderated ; but on the 11th and 12th, the wind having on those days become harsh and cold, his natural vigour and spirits induced him to escape from medical restraint, and resume his active exertions in the open air. When I saw him first on the 12th, he was labouring under a violent attack of pneumonia, accompanied by acute pain in the left side of the thorax, impeding respiration, particularly in

* Mr. Mansfield, of Camden-street, was the Apothecary in this case.

† See an Introductory Dissertation on the Institutes of Medicine, intended to be prefixed to an Essay on the Epidemic Diseases of Ireland, 20th and following pages.

the horizontal posture ; frequent hard cough ; pulse hard and full, 120 in the minute ; bowels freed by medicines previously taken ; skin hot and dry ; face darkly flushed ; tongue white and loaded ; thirst urgent ; skin hot,

Prescribed—Bleeding from the arm to 16 ounces, which was repeated twice on that and the succeeding day ; the blood became deeply and densely buffed, very soon after it was drawn from the arm ; and on standing for a while, the surface became yellow and cupped. It presented the same appearances at each repetition of the bleeding ; sixteen leeches were applied to the pained part, and blisters were subsequently employed.

Besides aperients for the due freedom of the bowels, saline and antimonial as sudorific mixtures, were employed, together with demulcent and expectorant mixtures for the cough. Diluent drinks *ad libitum*. Draughts with tincture of digitalis.

Under these means, considerable relief was obtained, until about the middle of the second day, when every symptom returned with increased urgency. The countenance became anxious, and he complained of the greatest anguish from the increased pain in his side ; the more striking, from his being remarkably serene, and habitually tranquil both in general appearance and manner. Aided now by Mr. Kirby, bleeding generally and locally, together with such remedies as the urgency of the case seemed to us to demand, were actively, but unavailingly resumed ; for, almost up to two hours before his death, which took place on the night of the 15th, there was no cessation of suffering ; and for that short period, the act of dying seemed unattended by any return of the pain, from which it finally released him.

Post Mortem Examination.

By the desire of his lamenting relations, who were anxious to know the cause of so sudden a loss, Mr. Kirby and I opened the body a few hours after death ; and the appearances found, whilst they were quite sufficient to account for the symptoms and result of the case, were greatly simplified by the total absence of any other marks of disease on the vigorous frame examined. The morbid appearances were entirely confined to the lungs on the left side of the thorax, the lobes of which had their vascularity displayed, as if injected ; and towards their margins, were in some degree hepatized ; but the most remarkable appearance was, the copious effusion between the pleura pulmonalis, and the lungs themselves ; and between them and the pleura costalis, of coagulated buffed blood ; through every part of which, however, the colour, the consistence, and every other external character *completely identified* it with the buffy coat, such as it has been already described, and compared with that which covered several cups of blood which still lay in the apartment, and which had been drawn from the arm, but a few hours before dissolution. Between the pleura costalis and pleura pulmonalis, the adhesive process had commenced, and in some parts, was already far advanced.

As the preceding case and dissection may be considered as the first link in the chain of evidence I purpose to adduce of certain organic diseases originating in the fluids, I am happy to have the able assistance which the following note from so experienced an anatomist as Mr. Kirby, affords, towards establishing that evidence.

Harcourt-street.

MY DEAR SIR,

I read with care your account of all the circumstances connected with the illness and post mortem examination of Mr. ———; and referring to my notes of the case, I find you accurate as far as your detail goes. You have omitted the following part:—

1st—That the buffed coloured effusion on the surface of the left lung was general, as far as the anterior surface was concerned.

2d—That it appeared to be incorporated with the pleural surface of the lung, by an obviously vascular connexion.

Yours, ever truly,

J. KIRBY,

December 13, 1828.

*CASE II.

A Medical Gentleman, 26 years of age, while dissecting at the Anatomical Theatre of the University, wounded his finger, which at the time was but slightly inflamed. Some time afterwards, however, an eruption appeared on the wounded hand, very similar to that which he recollected to have been on the surface of the body which he had been examining. When I afterwards saw that eruption fully out, it resembled the psoriasis of Dr. Bateman more than any other of those in his list of contagious diseases, but partaking more of the nature of the taint, which in this instance probably rendered it infectious; and that taint, from the coppery colour of the eruption on the forehead and roots of the hair, appeared to me to be somewhat siphilitic. When I first visited him professionally, which was on the 26th of October, 1824, I learned that this eruption had been confined, for a considerable time after its first appearance, to the fingers of the wounded hand, but afterwards appeared in patches elsewhere, particularly over the forehead, and extending to the scalp; that it sometimes retired suddenly, and alternated with symptoms of derangement in the functions of digestion, which were thus impeded or rendered irregular, and attended with vertigo; and with palpitations of the heart; that the retirement of the eruption had been partly the effect of external remedies applied to effect a radical cure; that since its total retirement, two months since, the paralysis of the left side, now his chief complaint, had commenced, first, with weakness in the whole side, that alternated

* Mr. M. Alpine, of Suffolk-street, was Apothecary in this case.

more than once with that of the opposite side, before it assumed its present form, and before it was confined as it is now, to the lower extremity of that side, from the hip down; which weakness is so great, that he drags the toe against the carpet in walking; the shoulder too, on that side, is lower than the other, except during the effort he makes to raise it to assist a step from the corresponding foot. The pulse is full and strong, but somewhat irregular in both arms, and he is subject to involuntary motion of his limbs, but particularly of those on the paralytic side; the tongue white and loaded; he has sometimes transient headache, sometimes vertigo; also pain in the back and hip, which is also transient, and sometimes of very short duration; there is considerable soreness and fullness on pressure over the epigastrium and right hypochondrium; the skin generally, and the tunicae albuginæ of the eyes slightly jaundiced; the blood drawn from the arm once or twice for the relief of these complaints, is stated to have been very sizzly. To detail the subsequent symptoms minutely, or the means employed for their relief, in consultation with many eminent Physicians and Surgeons, would be foreign to the objects now proposed, further than the indications first to restore the repelled eruption; and secondly, to relieve the local affections, seemed to be well answered by the internal use of mercurial and antimonial powders, sometimes combined with digitalis, with a view to their alterant qualities, sometimes combined with purgatives, so as to insure a due and regular freedom of the bowels. By local abstraction of blood, too, and stimulating and acrid liniments, and by blisters applied to the parts affected, temporary relief was frequently obtained. But this relief was always most remarkable when the eruption was most fully out, and *vice versâ*. The sulphureous waters, particularly those of Lucan, which in the summer months he drank at the spring, appeared to be also beneficial, as were also warm baths, which were employed either locally or generally, and sometimes in the form of a shower bath, as indicated by circumstances. But, notwithstanding such temporary relief, still in each successive season, the inroads of disease on mind and body, though both were naturally of very extraordinary vigour, became on that account the more observable. In the beginning of 1826, an increase of the paralytic affection was preceded by a violent and universal spasmodic attack; and it was accompanied by painful spasms, sometimes generally, but more frequently in the paralytic limbs, so as to impede rest both by night and day, and still further assisted to sap vital power; neither had any anti-spasmodic medicine that could be devised any obvious effect in relieving those spasms, except narcotics, especially opium and hyoscyamus, alternated with the use of active purgatives.

In the month of April of that year, he was attacked with rigors, which were succeeded by the symptoms of our typhoid Fevers in the most exquisite degree, such as dark measles-like petechiæ over the trunk and extremities; gangrene, which commenced on the sacrum, and extended to both hips, and ultimately to a considerable portion of the back and thighs externally, by which all the integuments were so completely destroy-

ed, that the bones of these various parts became denuded even of the periostium. The paralysis seemed to extend to the intestinal canal, and the whole of the renal system ; and when discharges from the former were effected with great difficulty, they were found dysenteric ; and the urinary discharges passed involuntarily, were either limpid or sanguineous ; emaciation of every part proceeded so rapidly, that before dissolution, which took place on the 22d of May, 1826, the afflicted friends of this excellent man saw him reduced to a skeleton.

York-street, January 26, 1827.

MY DEAR SIR,

At your request, I send you a copy of my notes on the dissection of the body of the late Dr. ———, which we made in the presence of Mr. Wilmot.

I am, my dear Sir,

Yours, very truly,

To Doctor Stoker.

J. HOUSTON.

The body was much emaciated,* but free from anasarca swellings. The sacrum and hips presented sloughs of considerable magnitude. The scalp was remarkably dry, and devoid of both serum and blood. The bones of the cranium were more solid than is usual at such an age ; their cancellated structure having nearly disappeared. The furrows made by the arteries of the dura mater, were unusually deep. When the calvarium was taken off, and the brain exposed, a much greater quantity of clear serous fluid than is found in the healthy state presented itself. The fluid which occupied both the cavity of the arachnoid membrane, and the texture of the pia mater, was so abundant, that when the brain was removed, the fossæ in the base of the skull were partly filled with it. The membranes in other respects appeared sound, the brain healthy, and free from any watery accumulation.

On the right side of the falx, opposite the coronal suture, a small tumour was discovered, having an attachment to the internal surface of the dura mater. It was about the size of a large hazel-nut, and somewhat smaller at its root than elsewhere. It was soft, though elastic, of a whitish colour, and irregular on the surface, as if formed of granulations. It had contracted adhesions to the arachnoid membrane, and was sunk into a bed which it had formed for itself on the surface of the brain, and which remained visible after its removal.

* Having frequently observed extreme emaciation of the body of those dying of Fever, as happened in this case, during the prevalence of easterly winds, it appeared to me very analogous to what is stated to take place rapidly with those who die from the consequences of exposure to the Serocco winds of Africa.

The liver was larger and more solid than natural ; its colour was a pale yellow, variegated with greyish brown granules. The larger branches of the vena porta were unusually turgid with blood, which was remarked to be of a darker colour and thinner consistence than ordinary. The intestines were pale, flaccid, and nearly empty, but without any diseased change of structure. All the organs in the chest were in a perfectly healthy condition.

*CASE III.

Case of Organic Disease, &c. &c.

A gentleman, 50 years of age, strong and athletic, though of spare habit and saturnine complexion, was suddenly attacked in November, 1822, whilst reading in the evening at one of our public libraries, and fell from his chair apoplectic. When visited soon after by his medical attendant, the late Mr. Richard Aston ; he was copiously bled from the arm ; and soon after his removal home, I was called on to meet Mr. Aston. We found him still speechless ; face deeply flushed, and drawn to the left side ; there was complete paralysis of the whole of the right side, with considerable rigidity and convulsion of the left ; the pulse was remarkably strong and full ; indeed there was a peculiarity in its beat, which I became well acquainted with afterwards in his successive attacks, such as I had not observed in the same degree in any other apoplectic case ; for, to the touch, the lumen of the artery, in whatever part of the system it was felt, seemed to be increased one-half more than natural ; and the impression of it on the finger, resembled more that which would be produced by the impulse of a solid body on the coat of an artery than by a fluid ; breathing laborious and sterterous. I now learned, that previous to this attack he had enjoyed uninterrupted health, and had been remarkably vigorous in both mind and body ; but, that for several years, he had hæmorrhoidal discharges from the rectum, which for the two last years recurred regularly at monthly periods, until the last two months, during which there had been no such discharge. This interruption of the hæmorrhoidal discharge, had been attended by costiveness, and a sense of fulness of his stomach and head ; so inconsiderable, however, were these symptoms, that he did not think it necessary to attend to them, and attributed the sense of fulness to the costiveness which had often occurred before, and until the present time, was borne for many days with impunity.

Prescribed—A repetition of the bleeding from the arm, and the blood was allowed to flow until 24 ounces were taken. The blood became sizy as soon as it appeared in the cups, the surface being of a dusky white, a colour which extended an inch into the crassamentum after it had formed ; the serum was not in proportion to the crassamentum, and was limpid. Be-

* Mr. Stevenson, of Meath-street, was Apothecary in this case.

sides the bleeding from the arm, the temporal artery on the right side was opened, and nearly as much blood was taken from it, as from the arm. Active purgative clysters were directed to be thrown up by a syringe every two hours, until the bowels were freed; and as soon as the capability of swallowing was restored, a mixture of infusion of senna, manna, and electuary of scammony, was directed to be given in divided doses, to aid the enemata. The head was shaved, and washed with camphorated spirit of wine, and the feet, which were colder than natural, were kept wrapped in a succession of warm flannels. A blister to the nape of the neck. About an hour afterwards the bowels were opened by the enemata, and some scybalous discharges followed. The procedentia ani now appeared enlarged and inflamed; sensibility returned, together with speech in some degree, also the capability of swallowing; the power of using his left side was also now increased; but the paralysis of the right, and the drawing of the mouth to the left side, became more apparent; breathing easier.

The purgative mixture already mentioned, was now administered, and 20 leeches were applied close to the verge of the anus. Barley water was allowed as freely as he could drink it.

On the succeeding day, the purgative medicine having operated freely, and the leeches having drawn copiously, and a considerable quantity of blood having come away with the stools, every symptom was improved; he had two or three hours quiet sleep, and awoke from it fully sensible of his changed condition, but without any recollection of the manner or immediate consequences of the attack. The paralysis of the right side continued, which affected the muscles of the palpebra of the eye on that side, and it remained closed, the mouth also remained drawn to the left side. He complained of headache and tinnitus aurium. The face was flushed; skin hot, and tongue white, Pulse more moderate, but still remarkably full and strong. Urine scanty and high-coloured, approaching to hæmaturia.

Prescribed—Twenty leeches to the temples; an ice-cap to be applied, for fifteen minutes at a time, every three hours: the feet to be fomented in the intervals for half an hour at a time, and to be kept still covered in warm flannel. A pill, composed of compound colocynth pill, mercurial pill, and tartarised antimony, to be administered with each dose of the purgative mixture, until the bowels are more fully freed; and the drinks, with barley-water, to be continued.

In the evening, the bowels having been fully opened, and a considerable quantity of grumous blood discharged with the fæces, all the symptoms, except the paralysis, were much improved. The skin, however, continued still dry and hot.

Prescribed—Three grains of James's powder, and one grain of powdered digitalis, to be given every fourth hour through the night. The fomentation of the feet, and embrocation of the head with camphorated spirit of wine, to be repeated.

Under this treatment some improvement in the symptoms was ob-

servable on every succeeding visit ; and at the end of three weeks from the attack, the paralysis itself was so far relieved, that he was able to walk and make use of the arm of the affected side, so as to resume many of his usual avocations. This amendment was promoted by strict attention to diet—by the use of the purgative pills already prescribed, so as daily to insure the due evacuation from the bowels—by keeping the blistered part of the neck open with ointment of cantharides (as he would not submit to a seaton, as proposed)—and by the daily use of a shower-bath, at first tepid, but gradually lowered in temperature till it became cold, whilst he stood in a trough filled with warm water. And although the paralysis never was totally removed, yet he has since, except with intermissions of a few days at a time each year, been able to perform all the duties of life, and hold his usual station in it, until the last autumn. It should be observed, that the periodical returns of the hæmorrhoids have taken place from the commencement of this amendment, and that the interruption of it has been attended with contemporaneous interruption of health, and likewise that the blood drawn in every subsequent attack has presented the same appearances by which it was described in the first of these attacks. These remarks will be found to be intimately connected with the detail of the case which follows.

In the months of August and September last, the debility of the paralytic side became obviously increased ; the bowels becoming more torpid, and the hæmorrhoidal discharge at the usual periods being greatly diminished. The difficulty of speech increased considerably, and drowsiness through the day, accompanied by aversion to either mental or bodily exercise, together with broken rest at night, indicated the approach of an apoplectic attack. By general and local bleeding, and especially the application of leeches near the lower extremity of the rectum—by blisters and strict antiphlogistic regimen—by James's powders at night, and aloetic purges in the day-time, these symptoms were relieved, and a return of the hæmorrhoidal discharge again effected. The effect of the blisters on this occasion, as well as when applied in former attacks, was remarkable, inasmuch as the serous effusion under the vesication assumed a membranous texture, and when removed, in order to be dressed, was nearly solid. Connected with this, another circumstance, which I had not been previously apprized of, deserves to be noticed. This was the formation of firm but elastic excrescences from the extremities of both ulnæ, about an inch and a half in length, and of the thickness of the thumb, which, on being closely examined, appeared to be attached to the membranous covering of the upper extremities of the radii and ulnæ, on both sides. These excrescences, he informed me, had been gradually increasing from their beginning, about a year before this time ; for he noticed them when stripping to use the shower-bath, according to his daily custom, in the manner already mentioned.

Early in October, I was again called on, in consequence of an extensive anthrax having formed over the dorsum of the right scapula,

which, as well as the integuments surrounding it, was so completely deprived of sensibility, that in the usual crucial incision, which was made by Mr. Stephenson, and carried down to the muscles underneath, not the least pain was excited ; on the contrary, some relief succeeded from a certain uneasy sensation, previously felt in the tumour and the parts in its vicinity. Sloughing of the substance of the anthrax rapidly followed ; but the rapidity of the formation of new integuments was as rapid ; for on the left side of the vertical incision. the cavity left by the slough detached, was completely filled up by new and healthy granulations, before the slough on the opposite side was entirely separated ; and although, by Surgeon Willet's assistance, which I had afterwards the satisfaction, of having in this case, active means were employed to restrain the too luxuriant granulations on the one side, and the knife used for the separation of the sloughs on the other. Subsequently, three other anthraces, of a much smaller size, went a similar course ; and it is also worthy of attention, that on the formation of these bubonic tumours, and during their removal, the paralytic symptoms were considerably abated, so that the strength of the paralytic side had greatly increased, and the drawing of the face to the left side was as obviously diminished.

A seaton which I had long urged in vain, was now permitted to be placed in the neck ; and soon after, mental and bodily power was so far restored, that this gentleman again resumed his active pursuits in life ; with the injunction, however, that he should be closely attentive to the due freeing of his bowels, by the means provided for that purpose, and to a strict observance of abstemious diet, to which indeed he had long submitted without reluctance.

On the 2d of November, very nearly the same day of the month on which, six years before, he was first attacked, he was seized in precisely a similar manner. Soon after dinner, at which he indulged in two or three glasses of wine, and ate animal food rather more freely than usual, he fell from his chair apoplectic ; and when I reached him, though a large quantity of blood had been taken previously from the temporal artery by Mr. Stephenson ; he lay speechless, and violently convulsed, particularly on the left side ; his breathing was laborious, and his pulse beating violently in the left side in the peculiar manner already described, but unequal and irregular on the right ; the strongest pulsation not being so strong as any of the pulsations in the left side. I now learned, that anxiously engaged in business, this gentleman had so neglected his bowels, that they had not been freed for three days before ; that the discharge from the seaton in the neck had nearly ceased during that time, and that the itching of the integuments, where the anthraces had been, had interfered with, and interrupted his sleep.

I now prescribed bleeding from the arm in addition to that from the temporal artery ; but the blood drawn did not exhibit the buffy coat, as on former occasions, neither was the crassamentum so firm ; and subsequently,

the treatment was so similar to that which has been already detailed in the report of the first attack, that it would be needless to recapitulate it; and recovery, though slowly, yet more completely returned, than in any of his former attacks. The circulation of the blood became more equable in both sides of the body; the features were restored more completely to their natural condition, and the vigour of mind and body have become more remarkable than had been observed since his first attack. Strict attention, however, to what had been ascertained to be *juvantia* and *lædentiâ* in his case, particularly as regarded diet and the due freedom of his bowels, was strongly recommended.

P.S.—DEC. 23, 1828.—Two circumstances respecting the foregoing case, are highly deserving of notice, and with which I have been lately made acquainted by the gentleman himself; the first is, that for fourteen days previous to his first attack, he felt severe headache at four o'clock, A.M. every morning; but that the interruption to the monthly hæmorrhoidal discharges adverted to in the case, took place nearly two months before; and he attributed the headaches to frequent wetting of his feet when out shooting, an amusement which he was fond of; the other circumstance is, that one of the elastic tumours stated to have formed on the elbows, namely, that on the right, had been completely absorbed, during the time of the sloughing of the anthrax over the right scapula; but the similar excrescence on the left preserves the same appearance and elasticity, and is of a conoid shape, and about the size of the two distal phalanges of the fingers and thumb.

MARCH 1st, 1829, weather severely cold, but dry. At half past three P. M.—I was called on to visit this gentleman, and soon after found him lying in a fit of apoplexy, accompanied by general spasms, slight foaming from the mouth, stertorous breathing; the pulse beating violently, with corresponding violence of action of the heart itself; face flushed, but not so much distorted as on former attacks. These symptoms soon remitted in a considerable degree, after a copious bleeding from the arm; but he relapsed soon after; and being carried to bed, the symptoms returned as urgently as before, until, by a free discharge of blood from the temporal artery, the spasms, stertorous breathing, and violent action of the arterial system, were again relieved. His speech was also restored, though imperfectly, and he was able to open his mouth and protrude his tongue, at my request; and soon after he was enabled, with some assistance, to indulge the desire he expressed, of going to the night chair, where he passed a considerable quantity of urine, to which there had been some impediment during the last twenty-four hours. This, and the itching of the right shoulder, which is adverted to in the case, were the only complaints, it appears, he had made for several weeks before—having been every day as actively employed as he had ever been for many years; and even immediately previous to this attack, took a long walk before dinner, and returned much animated; but soon afterwards, whilst remarking the keenness of

his appetite, and the coldness of the day, he fell down suddenly with such force as to inflict a severe wound upon his face, by striking it against a projection on the surbase of the room.

At about seven o'clock in the evening, there was another apoplectic fit; after which, speech, capability of swallowing, and of retaining the injections administered, took place for several hours; then, also, sensibility, speech, and considerable muscular power was restored, and the aperients which had been administered, produced copious alvine dejections of which he was conscious. Towards the morning of the 2d instant, however, violent action of the heart and arteries preceded another paroxysm of great severity, which was succeeded by extreme debility, laborious breathing, and bronchial crepitus, which, though in some degree relieved through the day, by an aromatic mixture, composed of compound spirit of ammonia, water, and syrup, whenever he was able to take it—by blisters over the chest, and turpentine fœtid enemata—yet was not decidedly so; and when, in the evening, I visited him, accompanied by Surgeon A. Colles, though animation was considerably restored, and other symptoms somewhat improved, still vital power was obviously declining. In the course of the succeeding night, however, as Mr. Stevenson, who sat up with him, informed me, during the intervals between three paroxysms that took place, speech, intellectual, and even muscular power, were more completely restored than they had been during the preceding twenty-four hours; but another paroxysm on the third inst., shortly before my visit at 11 o'clock, A.M. effaced every remnant of that favourable change—and death took place at two o'clock, P.M.

The Post Mortem Examination, which I made 18 hours after death, assisted by Dr. Aston, Surgeon Willet, and Mr. Stevenson.

Externally, the body appeared to have lost nothing of its natural fullness; the surface over the whole of the posterior part, however, from the head to the feet, was of a dark purple colour; and the tumour on the left ulna, remained of the same size and external appearance, as described in the case; and on cutting through the integuments, both the adipose membrane and muscular fibre were well supplied. On making an incision through the integuments over the tumour, and removing it from its strong adhesion to the sheath of the muscular fibres, it was found to consist of a cartilaginous tunic, about the fourth of an inch in thickness, containing a calcareous substance.*

HEAD.

On raising the calvarium very strong adhesions were found between it and the dura mater; the vessels lying in the convolutions were turgid. The arachnoid covering was very much thickened, and of a milky colour;

* This tumour in all external characters, strikingly resembled that taken from the brain in the post mortem examination, stated at page 248.

and both superficially and where it lined the convolutions, but most remarkably in the right hemisphere, there was copious serous effusion underneath. The consistence of the brain itself was in general natural; but very considerable serous effusion into the ventricles, and around the medulla oblongata, had taken place, and the serous fluid flowed abundantly from the medullary spine. This serous effusion amounting in all to about four ounces and half, together with the thickening of the arachnoid membrane, were the traces of disease found in the cranium.

THORAX.

Two pounds of serum were found in the left cavity of the chest; and the lungs on that side were of a dark red colour, and somewhat hepatized; both of which circumstances appeared to have very recently taken place. The lungs in the right cavity had this colour and hepatization in the greatest degree; but there was little or no effusion into that cavity.

On opening the pericardium, about two ounces of fluid escaped from it. The heart was enlarged to nearly twice its natural size, and its weight was increased three-fold. The right auricle and ventricle were of the ordinary capacity, but the thickness of their walls was somewhat greater than usual. The valves between this auricle and ventricle, and those at the mouth of the pulmonary artery were sound, and the openings which they guarded, of the natural dimensions. In the left cavities of the organ, the hypertrophy which gave it such magnitude and weight, existed. The left auricle was dilated, and its muscular coat thickened. The opening between it and the ventricle was contracted, and the mitral valves hardened, opaque, and inelastic, but without any ossific deposit in their texture. The cavity of the left ventricle was somewhat diminished, but its walls had undergone very considerable increase of thickness and density. The aortic opening was contracted, so as to admit the fore finger with some difficulty, and the semilunar valves connected with it were shrivelled and white—they had lost their natural pliancy, and in some places were rendered immoveable by solid deposits of bony and cartilaginous matter.

The commencement of the aorta was in a slight degree dilated, and its inner surface mottled with spots of steatomatous and earthy incrustation.

ABDOMEN.

The viscera of this cavity presented nothing preternatural, except that the intestines were considerably inflated. I regret, on account of the previous history of his case, not having made more minute examination of the lower part of the intestinal canal; but at the same time I think it possible, that there, as well as in many other parts where organic disease had been the consequence of morbid accumulation of blood; these organic affections were afterwards removed by absorption, as happened with the tumour on the right ulna; and further, it seemed that the hypertrophy and disorganization of the heart, though not so recent as the hepatization of the lungs, were

yet of a much later date than the disorganization found in the arachnoid covering of the brain. To the hepatization of the lungs, indeed, which seemed to be induced by over exertion, and exposure to intense cold, I am inclined to attribute the last apoplectic attack, and its final result.

CHRONIC HEPATITIS.

Fourth Case of Organic Disease connected with Sisy Blood.

John Woods, a shoe-maker, aged 39, whom I found amongst the patients placed under my care, in Dec. 6th, on my return to intern duty, at Cork-street Hospital, where he had been admitted several days before, on account of fever, connected with a tumour over the right hypochondrium. On examining this tumour, I found it of a conical shape, the size of the fist of a large man, but with an irregularly circumscribed base, extending from the epigastrium as low as the navel, and over a considerable portion of the right hypochondrium. There was considerable soreness to the touch over the whole of the right hypochondrium, but no soreness on pressure, either on the left hypochondrium, or below the navel. From an opening in the tumour, which had been made by Surgeon Trant, in consultation with Dr. Colles and Mr. Cusack, on the preceding day, three portions of a buffed coagulum were just now discharged; and I was informed by the nursetender, that a great many of these formed substances, together with extremely foetid ichor, had been ejected immediately after the opening of the tumour. These substances, which were oval, and about the size of a silver sixpence, had the surface on one side smooth, and of the colour and consistence of the buffy coat on blood, but the other was more granulated, or formed of globules, and had also more the appearance and consistence of fat. This distinction between the surfaces was most remarkable in one of these tunic-like substances, which happened to be in its transit through the aperture of the wound, at the moment I was examining it; for it was coiled up, so as to adapt itself to the round margin of the aperture; but, on being detached from that, it immediately assumed the same form with the others—and appeared to me to be about the eighth of an inch in thickness: that surface, which had been next the sides was smooth, and of the colour and consistence of the buffy coat of hepatic blood; the surface, on the other side, had the globular appearance and consistence of fat, approaching to a fluid state. The countenance of the patient was anxious and flushed; and his emaciated body and limbs indicated much previous suffering from disease; the tongue white, but moist; the appetite keen; pulse full, and about 110, as he sat up in the bed. He rests and feels better since the tumour was opened; bowels have been freed by a draught, with castor oil, assisted by a clyster; the stools of rather an ochry appearance; urine high coloured, and not passed in the natural proportion; both of the lower extremities anasarious from the middle of the thighs; found the wine, ordered for him yesterday after the operation, agreeable, and he

thought serviceable to him; his food also, for which he has a keen appetite, agrees well with his stomach.

Prescribed—Middle diet; wine, six ounces. Repetatur haustus oleosus quamprimum; et injicietur enema vespere, nisi prius solverit alvus. Sumat tincturæ digitalis, gutt xij. ex aquæ pauxillo ter indies.

DEC. 7th—Bowels freely opened by the draught alone; stool of an ochry colour; rested well in the recumbent posture; pulse 120, but not quite so full as yesterday; appetite keen; urine loaded, but not of so deep a colour as yesterday.

Repetatur haustus oleosus; et sumat tincturæ digitalis, gutt x. modo dicto octavâ quaquâ horâ.

During my visit this day, the patient's wife, a remarkably intelligent woman, gave me the previous history of the case as follows:

Her husband had not been healthy for nearly sixteen years, he being liable from the beginning of that period to stomach complaints, such as acidity and eructation, the former symptom most urgent whenever he drank tea, and the latter when he drank cold water; at the same time, however, he could eat solids, particularly fat meats without disagreeing with him. He often complained of a bitter taste at his mouth, and sickness at stomach, and this was generally accompanied by some yellowness of his eyes, and depression of spirits. In some of these attacks, he was affected with fainting fits; and about six months ago, a violent attack of pain in his stomach was succeeded by convulsions, during the continuance of which, however, his consciousness was not destroyed; and soon after this attack, the abdominal tumour already described, was first noticed. The blood which was then drawn, in large quantities from his arm, by Mr. Lewis of Meath-street, presented the same appearance it had done, in several previous attacks, and which, from its being so remarkable, she perfectly recollects. The surface of the blood on the cups, she said, was first the colour and consistence of cream, but afterwards, became gradually yellow, particularly in the centre; and on the next day, a speck of about a quarter of an inch in diameter might be distinguished from the rest: this buffy coat occupied a large proportion of the clot underneath; on examining this clot the succeeding day, the lower part appeared to be as black as jet.

From Surgeon Trant, I learned, that previous to the opening of the tumour, it had more of a conical shape, as indeed it had when I first saw it, than on this [my second day's visit; but, that he was surprised to find its bulk, so little altered by the first discharge; that on passing the probe to the bottom of the wound, he could distinctly feel, that it entered into the structure of the liver. He further stated, that those substances which passed from the opening in the tumour as soon as he made it; first impressed him with a belief ~~that they were hydatids~~, but that afterwards the discharges were distinct hydatids. Those I had seen discharged, probably from accidental circumstances, had not acquired either the shape or structure by which Dr. Baillie designated them, nor as

described by Dr. M'Loughlin, in his fatal case of complicated dropsy, and interesting dissection soon after dissolution, which may be seen in the Transactions of the King and Queen's College of Physicians, page 242 and 243. On the contrary, they appeared to me, as already stated, like dissected portions of the buffy coat of blood in hepatic diseases, but moulded into shape by the cellular membrane, into which they had been effused; neither could I discover between their flat surfaces any cavity containing a fluid; for, the fluid on the globular surface was free from any covering. However, such effusions of the sily portion of morbid blood I thought might account for the formation of cysts, and for the origin of hydatids themselves—a conjecture which would be rendered more probable, if in advanced stages of this tumour, these carneous substances discharged, should assume still more of the characteristics of hydatids.

DEC. 8th—Feels much better to-day, and rested well; draught operated freely; stools more natural in colour; tongue soft and clammy at the edges; pulse 86, as he rests in the horizontal posture. On examining the tumour to-day, it appeared greatly diminished, and much less sore on pressure. On examining it with a probe, it appeared that the cavity was greatly contracted, and that an adhesive inflammation had taken place. The pressure which the Surgeon employed, by putting on a flannel swathe, and compress beneath it, seemed to have agreed well; and I fully accorded with him in continuing it, having frequently experienced the good effects of that remedy for the relief of abdominal tumours, especially when assisted by the tincture of digitalis internally.* No discharge from the opening in the tumour to-day.

Prescribed—Wine, 6 ounces. *Continuetur tinctura digitalis, ut heri prescripta est.* M.B.

DEC. 9th—Has passed a good night, and feels better; pulse in the recumbent posture, 84, and full, but on rising himself to sit up, increased to 110 in the minute; has taken his food with a keen appetite, and still relishes his wine; no stool; urine clearer, and better coloured, and somewhat increased in quantity. On raising his shirt, in order to remove the dressings, the hypochondria, particularly the right, appeared more than naturally elevated; and when examined with the stethoscope by Dr. William Stokes, who gave me the pleasure of his company on this day's visit, to the Hospital, the liver appeared to extend higher than natural into the right side of the thorax. On examining the orifice made in the tumour, it was in some degree contracted, and purulent matter issued from it, without any of the hydatids. Of the origin of these discharged, I again expressed my opinion; because of the close similarity in colour, tex-

* See cases of tumours in the abdomen, successfully treated by pressure and by digitalis, read by me at the Association of the King and Queen's College of Physicians, Nov. 5, 1816, and published in the first volume of the Transactions, page 11.

ture, and every external character of those portions I saw, with the buffy coat of blood drawn in hepatic disease, which was fully impressed on my recollection; and whatever form these substances may ultimately assume, I thought there were additional reasons to suppose they originated in effusion of morbid blood, connected with the diseased liver.

Prescribed—Wine, 6 ounces. Repetatur haustus laxans et sumat tincturæ digitalis. gutt x. ex aquæ pauxillo, octavâ quaquâ horâ. M.B.

DEC. 19th—Feels better in every respect; pulse firm, but 80 in the recumbent posture; urine much increased in quantity, and is clearer; the tumour has totally disappeared; the discharge from the orifice, which is now purulent, has also in a considerable degree ceased; and the soreness in the right hypochondrium is less complained of, even on pressure; bowels free; appetite and rest good.

Sumat tinct. digitalis, gutt xij. ex aquæ pauxillo, ter indies. Wine, 6 ounces. F.D.

During the eleven succeeding days, there was progressive amendment in every respect; febrile excitement gradually diminishing, and the external appearances and bodily strength improving; there was no alteration therefore made in the treatment last prescribed, until the 26th of December, when the tincture of digitalis was discontinued; and 2 grs. of the sulphate of quina, with an ounce draught of the infusion of columbo, was substituted in its place. The same diet and quantity of wine continued.

Further improvement was now observable till the 25th, when he complained of some cough, and a sense of uneasiness in the hypochondriac region; as well as in the course of the intestinal canal; some scybulous orange-coloured stools, with tenesmus; appetite however keen, and not to be satisfied with the full diet of the Hospital; animal food was still preferred; the tonic pills and mixture were now discontinued; and a castor oil draught, assisted by an emollient enema prescribed—Wine and diet as usual.

During the five succeeding days, the bowel complaint continued urgent; the stools liquid, orange-coloured, and sometimes of a sanious appearance; notwithstanding the employment of opiates, given both conjointly with castor oil and separately; and chalk mixture, with tincture of catechu, rice in addition to his food; his strength and appearance also deteriorated more obviously than even previous to his late amendment; and his countenance became anxious, and his voice became plaintive; the veins of his arms, which from the nature of his employment had been full and large, now shrunk back, as to be scarcely observable; his rest became more disturbed at night, and partial sweats, particularly on the trunk, were obviously colliquative; the symptoms of hepatic consumption were now no longer doubtful; and the diminution of vital power would not justify the trial of any remedy, besides those indicated by the bilious dysentery that accompanied it. On the 7th of January, however, acute pain in the left side warranted the abstraction of a small quantity of blood from the arm, but not more

than half an ounce had flowed, when I perceived it could not be spared from his system, and therefore more was not taken. The colour of this, however was highly instructive, when compared with the vivid red colour of that taken in the same stage of pulmonary consumption. In this case it was as black as ink; however, one or two spots that were rubbed over the skin of the arm, soon acquired a much lighter colour.

On each successive day after the 7th of January, the decline of vital power became more obvious, but this was unaccompanied by the return of pain, or any other distressing symptom. The pulse became gradually slower, and descended below 50, until the 10th instant, on which day he died about noon, and for several hours before dissolution no pulse was to be felt at any part of the arterial system.

Having obtained permission from the family to examine the body, it was removed home from the Hospital early on the succeeding morning. I found it extremely emaciated, but without discolouration or *ætor*; neither was there any remnant of anasarca in the lower extremities.

I am indebted to Mr. Houston, both for his assistance at the *Sectio Cadaveris*, and for the following statement; as well as for the preparation of the morbid parts, delineated in the annexed plate.

Sectio Cadaveris, seventeen hours after death.

The peritonium, covering the intestines, appeared unusually red, owing to a remarkably turgid condition of the small blood-vessels underneath it; but the absence of any general adhesions or effusion on its surface renders it unlikely that the redness was the result of inflammation.

Two cysts, each about the size of a goose-egg, and communicating with each other by a circular opening, were found in the left hypochondriac region, between the anterior surface of the liver, and the cartilages of the ribs. Their walls were from half a line to a line in thickness, and when cut with the scissors, gave a crackling noise, as if intermixed with osseous matter. The external surface adhered universally to the adjacent portions of the liver, colon, stomach, small intestines, and diaphragm; even the lung was united with the diaphragm at this point, though in every other situation it was perfectly unadherent. The tumour, by its pressure, had formed a considerable excavation on the liver; and the connexion between it and the cicatrix in the skin, through which the discharges had previously escaped, was easily traced, though the cicatrix was somewhat below it. The internal surface of the cysts was of a grayish blue colour, and covered with soft flocculi of lymph, which admitted of easy detachment. That cyst connected with the cicatrix was empty, as probably all its contents were evacuated; but the other was filled with large semitransparent laminae, tinged with a bilious yellow, and folded up on each other into the smallest possible bulk. They were of sufficient consistence to be unfolded, and even held up by one end, but gave way to pressure of the fingers as readily as the buffy coat on coagulated blood, which they resembled in many external characters.

PLATE 1.

Fig 1



Fig 2

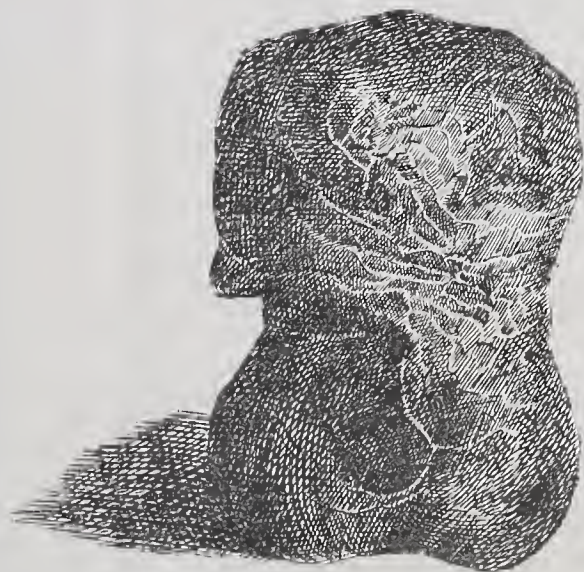


Fig 3

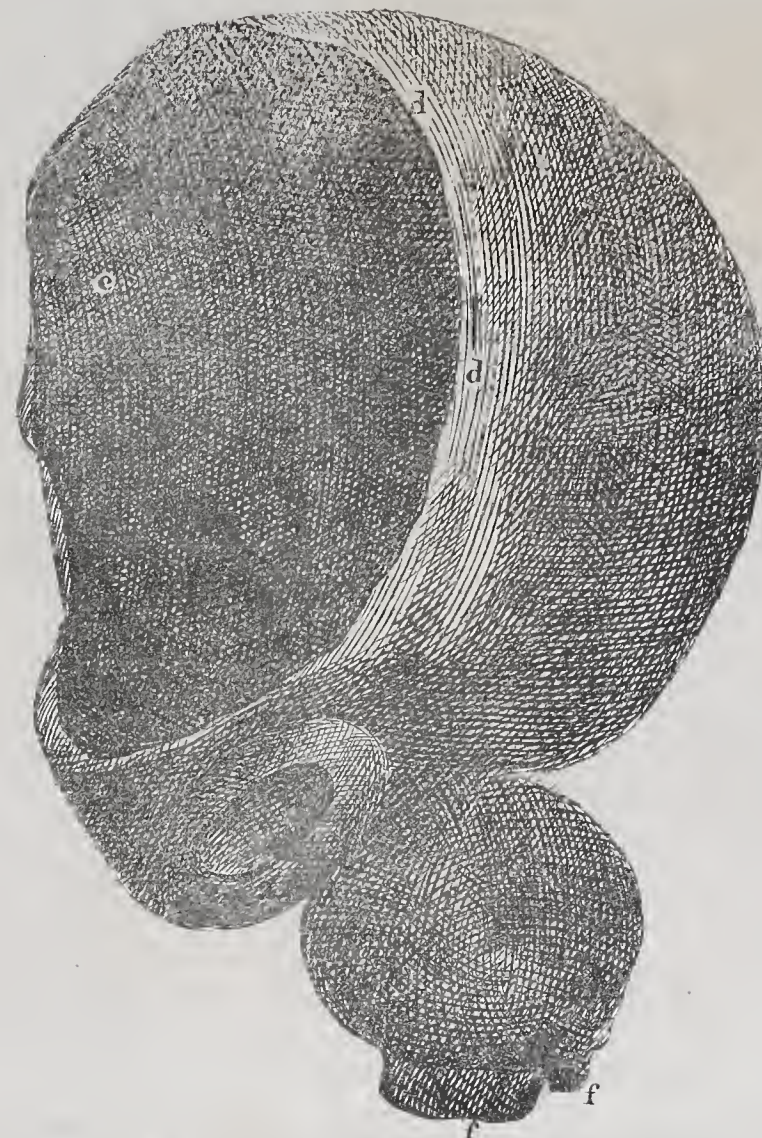
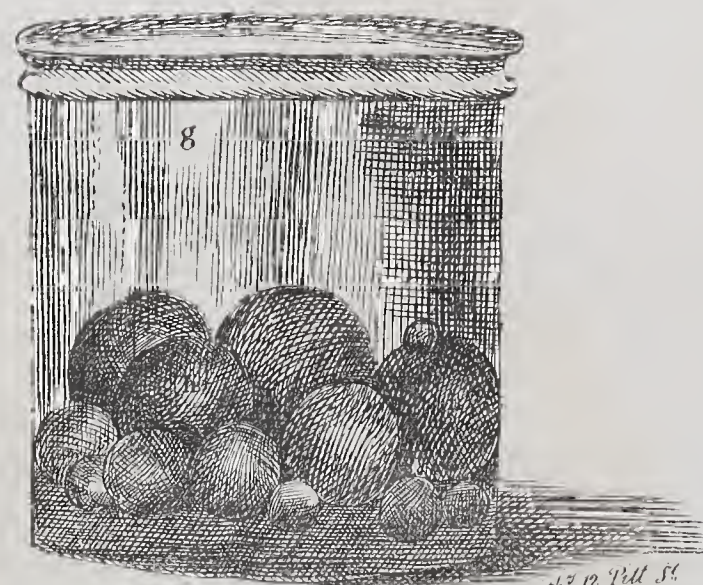


Fig 4



In the substance of the diaphragm, between the cordiform tendon and the xiphoid cartilage, a tumour as large as a pigeon's egg was discovered; it consisted of a sac filled with soft curdy matter, suspending some few laminae, like those noticed in the large cyst. A fourth bag hung suspended from the under-surface of the liver, behind the colon and stomach: it resembled that first described, both in its walls and contents, except that the latter were of a dirty white colour, and untinged with the colouring matter of the bile. The laminae in all the cavities were intermixed with a fluid of a yellowish colour, and somewhat thick consistence, as if mixed with chalk.

The tumours do not appear to have been otherwise connected with the liver, than that they had contracted adhesions to it, and by their pressure caused absorption of a portion of its substance. Its structure was sound, though somewhat pale in colour. The gall-bladder was much distended, and filled with a turbid dirty-looking serous fluid, very unlike healthy bile.

Several tumours of various sizes, from that of a pea to that of the urinary bladder when much distended, occupied the pelvis and lower part of the abdomen. They were all seated in the subserous cellular tissue, and adherent to the subjacent organs, whilst the peritoneum over them was unchanged. The largest nearly filled the cavity of the pelvis, displacing both the bladder and rectum, between which it was situated. These tumours differed somewhat in structure from those in the neighbourhood of the liver, and appeared to have been of more recent formation. The exterior investment was less thick and hard—the laminae were more soft and transparent, and enclosed numberless hydatids among their folds. These hydatids, which varied in size from a pea to a walnut, adhered each by a narrow soft pedicle, either to the laminae or some portion of the cyst; but in most places a stratum of dry chalky substance lined the inside of the cyst, and insulated its contents. (See Plate I.)*

* EXPLANATION OF PLATE I.

FIGURE I.

One of the Tumors from the Pelvis, laid open to show the arrangement of its contents.

- a a.* The cyst.
- b b.* The laminae.
- c c.* The hydatids.

FIGURE II.

A posterior view of the tumor represented in Figure I.

FIGURE III.

Represents one of the largest tumors.

- d.* The outside of the cyst.
- e.* The interior emptied of its contents.
- fff.* Smaller cysts attached to the large one.

FIGURE IV.

A bottle containing some hydatids in different stages of their growth.

- g.* The bottle.
- h h.* The hydatids.

A connection was established between the tumours in the pelvis and those in the hypochondriac region, by several firm organized bands, which were long and narrow, and unattached, except at their extremities ; and a coil of the small intestines, near its termination in the cœcum, was drawn up out of the pelvis, and joined closely to the uppermost tumour—circumstances which might suggest the opinion that those tumours had originated in the pelvis, and afterwards made their way into the hypochondriac region.*

CASE V.

Mary Donelly, aged 26 years, married 16 months, and mother of a child four months old, being five days previously ill, was admitted into the wards of the Fever Hospital, under my care, Dec. 26th, 1828, labouring under general symptoms of pneumonia ; for which she was repeatedly bled, both before and after admission ; the blood being deeply and densely buffed. Blisters and aperients were also employed with similar views. On the 29th of the same month, however, she was attacked with phrenitis, which, notwithstanding local abstraction of blood from the head, both by opening the temporal artery, and by leeches, assisted by shaving, and cold applications to it, and by the internal use of nauseating doses of a solution of tartar emetic, proceeded violently until about the twenty-eight day from the commencement of the Fever ; when on a sudden enlargement of the parotid and submaxillary glands on the left side ; the violence of the pain of her head, and of the delirium, so far subsided, that she got a little sleep at night, and justified the removal of the strait waistcoat, which had been found previously necessary for her security. On the subsidence of the submaxillary and parotid tumours, on the 29th of January, 1829, she was attacked with severe pain at the umbilicus, shooting over all the other parts of the abdomen ; which, notwithstanding the application of leeches to the pained parts in succession, fomentations and emollient enemata, with strict antiphlogistic regimen, continued unremittingly until the 3d of February ; when a tumour of the same form and size of that described in the case of John Woods, presented itself a little below the ziphoid cartilage, such as I have frequently seen to succeed Fever in the Hospital ; and such as may be seen adverted to at the 61st and 62d page of my report for the years 1820 and 21, in the cases of Daniel Smith and Catherine Small. In the present case, the tumour suppurated rapidly ; and on the 5th, it being deemed advisable to open it without delay, the patient was removed by her own and friend's desire, to her lodgings ; and in the evening, soon after she was rested from the fatigue of removal, Mr. Houston opened it with a lancet a little below the ziphoid cartilage ; and immediately from two to three pounds of purulent matter was ejected with considerable force, and this was followed with

* The preparations from which these drawings have been made, are preserved in the College of Surgeons, where they can at all times be seen, and the accuracy of the deliniations compared.

very general relief. On each succeeding day, the quantity of this matter discharged, amounted from a quarter to half a pound ; and the opening made by the lancet increased in size and depth, and was surrounded by a fungous sloughing ulcer. Debility and emaciation also advanced, notwithstanding the strength was supported by tonics, wine, and by the most nutritious food that could be borne on the stomach.

At 5 o'clock, A.M. on the 18th of March, 1829, she died ; and the following is the statement of the Post Mortem Examination, made by Mr. Houston, a few hours after death :—

Externally, extreme emaciation ; the abdominal muscles had sunk back to the spine. A fungous sloughing ulcer of a circular form, and about four inches in diameter, occupied the integuments opposite the ziphoid cartilage. In the centre of the ulcer, the orifice into the abscess was situated, and was about the size of a silver shilling. The abdomen was remarkably sunk in ; and on opening it, the small intestines, and the transverse arch of the colon, were found to have descended into the pelvis ; so that when the abdominal muscles were cut through, the first object that presented itself was the prominence formed by the lumbar vertebræ. The omentum and intestines were remarkably attenuated, and the latter quite empty and contracted. The stomach retained its natural situation, but was not larger than a portion of the colon of the same length. The liver was reduced to nearly one half its usual size ; its substance, excepting the cyst of the abscess, was unchanged by disease ; and with this exception, its colour, consistence, and form were perfectly natural. Its under surface was smooth, without any evidences of recent inflammation, or the least unnatural adhesion to the parts in contact with it ; its superior and posterior part adhered for several inches along the centre to the diaphragm, and the transversalis muscle. Around the circumference, the adhesions were soft, and of apparently recent formation ; but in the centre opposite the ziphoid cartilage, they were remarkably firm, as if they had been of much longer standing. In the middle of the dense adhesion, was situated the opening through which all the matter had been discharged, and which led into a cavity slightly irregular in its form, and about the size of a turkey egg ; this cavity was bounded by a cyst, about a line in thickness, and of somewhat cartilaginous consistence ; and was situated between the abdominal parietes and superior surface of the liver ; both of which equally contributed to its formation. Its inner surface was soft and villous, of a greyish red colour, and filled with a thin purulent matter of a reddish colour, and fœtid smell. The gall bladder was distended with yellow bile.

The organs of the chest were all remarkably healthy, not even an adhesion of the lungs existing, except a few soft recent ones, connecting the lower lobe of the right lung, to that part of the diaphragm opposite the liver.*

* The preparations of the liver, and of the morbid parts connected with it, are deposited in the Museum of the College of Surgeons.

I shall extend this Appendix to the statement of but one case in addition to these illustrations of the origin of organic diseases in the blood. The following remarkable case of aneurism of the aorta appears to me to deserve a place here, not only as affording such illustration, but also because it tends to confirm the truth of my opinion of the controlling power of digitalis on that morbid state of the blood, which produces organic diseases—a power which it would be of the highest importance to establish, even in one case in a hundred. The successful issue of all the three cases which I had an opportunity of treating seemed to me to depend chiefly on this remedy; and though I cannot fairly object to the scepticism of some respected practitioners regarding these opinions; yet, when it is recollected that Mr. Pott, perhaps one of the highest authorities in Surgery, considered the necessity of operations to be an opprobrium to his art, it is surely worth while to give some consideration to any proposal tending to remove that opprobrium. Neither should the merits of the proposal be judged by the humbleness of its source; for although the invention of the steam-engine is justly due to a Boulton or a Watt, yet the extension of its utility is mainly attributable to the observation of one of the humblest workmen engaged in the charge of its operations.

CASE VI.

Captain M. N——, 36 years of age, served eleven years in the East Indies, and during the last three years employed mercury freely, on account of severe attacks of liver disease and dysentery;—mercury had been also freely employed on other accounts, previous to his leaving home for India. Some time after his return home, he had some relapse, which went on increasing, until the spring of 1826, when he first consulted me. I found the liver considerably enlarged, and painful either on pressure or when he made any attempt to lie on the left side, and numbness and anasarca of the lower extremity of the right side, attended those symptoms, which were accompanied too with short cough, considerable irritability of mind, and great emaciation of body; the surface, too, was slightly jaundiced; and for the relief of those symptoms, inflammation being first removed by local bleeding; mercury was again employed both externally and internally, with decided benefit; and subsequently under the use of partial chlorine baths, and artificial Cheltenham water, taken alternately with the expressed juice of taraxacum, complete recovery appeared to have been effected.

But, whilst apparently in the enjoyment of health, he was in about a year afterwards suddenly attacked with painful stricture across the chest, difficulty of breathing, and inordinate palpitations of the heart, which were partly relieved by bleeding, aperients, and antiphlogistic treatment, prescribed by his medical attendant in the country, where he resided. Soon afterwards, however, a tumour appeared about the middle of the sternum, which was for some time treated as a common phlegmon. When I

saw this tumour in the spring of 1827, which was about three weeks after it was first observed, it was about the size of a middling melon, and owing to the pressure of the ribs on each side, and of the edges of the absorbed sternum, through which it had made its way, its extent was much greater in the transverse than in the vertical direction : it had an apex near the centre, and about that point the colour of the integuments was more livid than other parts of the surface of the body, which were generally leucophlegmatic ; the pulsation through every part of it was evident, not only to the touch but to the sight, and was synchronous with that of the arteries in every other part, and produced the same impression on the hand as would be given by placing it over the iliac or any other large artery, in its most vigorous condition. On auscultation, the beat of the heart and the situation of that organ appeared to be natural ; the pulse, however, in other parts was feeble, but particularly in the left arm, in which he complained of a sense of numbness, and the hand on the side was leucophlegmatic, and slightly anasarcaous.

As there could be no doubt that this was an aneurism or enlargement of the aorta, I stated its nature to the family, at the same time that I directed a repetition of the bleeding and a strictly antiphlogistic diet, to moderate the increased sense of stricture across the chest, produced by the journey to town. Soon afterwards the Surgeon-General met me in consultation, and he further confirmed the statement I had made, and concurred in the plan of treatment which I proposed. This plan consisted simply of the occasional employment of bleeding, to moderate the sense of stricture in the chest—a rigidly abstemious diet, obviating costiveness, to which there was a tendency—and the use of foxglove, on which I mainly relied, to control the irregular action of the arterial system, and perhaps also to correct the state of blood on which that irregular action depended, in the same manner as in two other cases of aneurism, the successful termination of which without operation, may be seen detailed at the 41st and two following pages of the first volume of the Transactions of the Association of the King and Queen's College of Physicians in Ireland.

Under this plan of treatment, continued more than a month under my direction, the circulation through the arterial system in general, became gradually more regular and equal ; the growth of the aneurism itself was obviously arrested ; and to the patient himself, and his anxious relatives, it appeared to have been actually diminished ; but as the summer was now fast approaching, and as this plan could be pursued in the country as well as in town, it was determined, in consultation with the Surgeon-General and Surgeon Colles, that on his return home, the same plan should be pursued. In the course of the succeeding summer, I learned, that under the direction of Surgeon Backhouse, the regulations and treatment which I had recommended had been continued, both in the condition of the local affection and in general health ; and that improvement had taken place to a degree exceeding even my most sanguine expectations ; and in the month of

August last, I was favoured by a visit in town from the gentleman himself, and was happy to find those favourable reports fully confirmed.* All external signs of the aneurism were removed; and on applying the hand closely over that part of the sternum, where the opening through it by absorption was effected; the pulsation of the heart and large arteries underneath, was no more than might be expected through the intervention of the intervening cellular membrane: his general appearance of health was completely restored; and for a while he had been allowed to deviate from the rigid abstinence which he had long so patiently observed; and this indulgence did not seem to be followed by any bad consequences. I have lately learned, that he passed the last winter (1828) without any complaint, and that he is at present in the full enjoyment of good health.

CONCLUSION.

I cannot conclude without observing, that as the period for making out the report was limited, and as my circumstances necessarily rendered my application

* I have been lately favoured with the report of this gentleman's case by a near relative and close observer of his, which I am happy to avail myself of on the present occasion, particularly as the following extract from it comprises a period, during which I did not witness the course of the symptoms:—

“In consultation with the Surgeon-General, and Surgeon Colles, it was agreed that he should be removed to the country, as the summer was now fast approaching; the tumour at this time had diminished considerably in size and pulsation; but notwithstanding that he had travelled by the canal boat, and took the easiest conveyance afterwards home, the agitation and fatigue of travelling increased the size of the tumour, and the pulsation in it to a considerable degree, and the pains in chest and shoulder became more acute than ever. A few days afterwards a large bag was discovered to extend itself downwards from the tumour; and this continued to increase in size, and the surface of it became quite livid, and the integuments so thin, that the rupture of them was hourly expected. In about three weeks, however, under the continuance of the treatment recommended by Dr. Stoker, the pains began gradually to decrease, and the contents of the tumour to be as gradually absorbed; so that at the end of three weeks, the appending bag-like tumour had entirely disappeared, but without any corresponding change in the size or in the pulsation of the aneurism itself. About this period, Captain M. N. consulted Mr. Backhouse, Military Surgeon, under whose directions he continued to observe the plan previously laid down by Dr. Stoker. In the course of the summer, the tumour gradually decreased, and the pulsation abated; and in the month of August, health and strength were so far improved, that Captain M. N. was enabled to walk about again, and even to visit his friends in Dublin. He has since enjoyed good health, and there is scarcely a trace of the tumour visible.”

to it desultory, there must be many faults in its execution, which are much in need of the kind indulgence of my readers. The critic will, I fear, be frequently shocked by the inelegancies of my style ; and others may object to the fewness of the remarks, by which facts are connected with the principles they are put forward to maintain. But it is hoped that such objectors will remember the truly philosophical observation of Bacon, “ that facts are the philosophy of history ;” and perhaps they will agree with another high authority, when he says, “ je sais que la vérité est dans les choses, et non dans mon esprit que les juge, et que moins que je mets du mien dans les jugements, que j’en porte, plus je suis sûr d’approcher de la vérité.”* If, however, the apology just offered, be deemed insufficient, I may add with great sincerity, that having done as well as I can, I may hope to be excused.

WILLIAM STOKER, M.D.

21, York-street.

March 16th, 1829.

* I have been induced to conclude with the above quotation from Emilius, from finding it adopted as the motto of the “ Recherches Anatomiques Pathologiques, et Therapeutiques,” par J. C. H. A. Louis, Docteur en Médecine des Faculties de Paris et de St. Petersburg, &c. &c.—A Paris, Chez J. B. Bailliére. Rue de l’Ecole de Medicine, No. 13, bis 1829. A work which I regret I could not further avail myself of, before this Report was nearly printed.

